PM 25 524-494 11/4/99

ROUNDUP D-PAK

Herbicide by Monsanto

Complete Directions for Use

EPA Reg. No. 524-494

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY CROPS), DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

Roundup is a registered trademark of Monsanto Co.

Container Statement:
Read "Limit of Warranty and Liability" which appears in the label booklet, before buying or using. If terms are not acceptable, return at once unopened.

Read the entire label before using this product.

Use only according to label instructions.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

Container Label Statement:

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. IT IS INTENDED THAT REPACKAGING BE ONLY IN ACCORDANCE WITH A MONSANTO REPACKAGING OR TOLL REPACKAGING AGREEMENT.

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1.0 INGREDIENTS

ACTIVE INGREDIENT:	
*Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt	62.0%
OTHER INGREDIENTS:	38.0%
	100.0%

*Contains 769 grams per litre or 6.42 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 570 grams per litre or 4.75 pounds per U.S. gallon of the acid, glyphosate.

This product is protected by U.S. Patent No. 4,405,531. Other patents pending. No license granted under any non-U.S. patent(s).

2.0 IMPORTANT PHONE NUMBERS

1. FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT, CALL TOLL-FREE,

   1-800-332-3111

2. IN CASE OF AN EMERGENCY INVOLVING THIS PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT,

   (314)-694-4000

ACCEPTED
NOV - 4 1999
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 524-494

3.0 PRECAUTIONARY STATEMENTS

3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children.

CAUTION!

DOMESTIC ANIMALS: This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

3.2 Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

3.3 Physical or Chemical Hazards

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, waterproof gloves, shoes plus socks.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep people and pets off treated areas until spray solution has dried to prevent transfer of this product onto desirable vegetation.

4.0 STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

See container label for STORAGE AND DISPOSAL instructions.

Container Label Statements:

(ALL CONTAINERS)

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

(FOR REFILLABLE PORTABLE CONTAINERS)
Do not reuse this container except for refill in accordance with a valid Monsanto Repackaging or Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(FOR BULK CONTAINERS)
Triple rinse emptied bulk container. Then offer for recycling or reconditioning, or dispose of in a manner approved by state and local authorities.

(FOR PLASTIC 1-WAY CONTAINERS & BOTTLES)
Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill. or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(FOR DRUMS)
Do not reuse container. Return container per the Monsanto container return program. If not returned, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

5.0 GENERAL INFORMATION (HOW THIS PRODUCT WORKS)

Product Description: This product is a postemergent, systemic herbicide with no soil residual activity. It is generally non-selective and gives broad spectrum control of many annual weeds, perennial weeds, woody brush and trees. It is formulated as a water-soluble liquid. It may be applied through most standard industrial or field-type sprayers after dilution and thorough mixing with water or other carriers according to label instructions.

This product requires the use of a nonionic surfactant. When using this product, mix 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. The surfactant should contain at least 70 percent active ingredient.

Time to Symptoms: This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Stage of Weeds: Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the annual, perennial, woody brush and trees rate tables for recommendations for specific weeds.

Always use the higher rate of this product per acre within the recommended range when weed growth is heavy or dense or weeds are growing in an undisturbed (noncultivated) area.

Do not treat weeds under poor growing conditions such as drought stress, disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust.

Cultural Considerations: Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfastness: Heavy rainfall soon after application may wash this product off of the foliage and a repeat application may be required for adequate control.

Spray Coverage: For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

Mode of Action: The active ingredient in this product inhibits an enzyme found only in plants and microorganisms that is essential to formation of specific amino acids.

No Soil Activity: Weeds must be emerged at the time of application to be controlled by this product. Weeds germinating from seed after application will not be controlled. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide and will continue to grow.

When this product comes in contact with soil, it is bound to soil particles. Under recommended use situations, once this product is bound to soil particles, it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treated area or if the soil is transported off-site. The strong

affinity of this product to soil particles prevents this product from leaching out of the soil profile and entering ground water

Biological Degradation: Degradation of this product is primarily a biological process carried out by soil microbes.

Volatility: Roundup D-PAK is non-volatile. Therefore, it cannot move as a vapor after application to affect nearby vegetation.

Toxicology Testing: Exposure to workers and other applicators generally is expected to pose minimal risks based on results of short-term toxicity studies. Glyphosate has been thoroughly tested and determined not to cause cancer or other adverse long-term health effects.

Tank Mixing: This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive label directions for each product in the mixture.

Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly recommended in this labeling. Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance.

Annual Maximum Use Rate: Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 5 quarts of this product per acre per year.

For noncrop uses, the combined total of all treatments must not exceed 6.7 quarts of this product per acre per year.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

6.0 MIXING

Clean sprayer parts immediately after using this product by thoroughly flushing with water.

NOTE: reduced results may occur if water containing soil is used, such as visibly muddy water or water from ponds and ditches that is not clear.

6.1 Mixing with Water

This product mixes readily with water. Mix spray solutions of this product as follows: Fill the mixing or spray tank with the required amount of water. Add the recommended amount of this product near the end of the filling process and mix well. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

6.2 Surfactant

This product requires use of a nonionic surfactant. When using this product, mix 2 or more quarts of nonionic surfactant per 100 gallons of spray solution. The surfactant should contain at least 70 percent active ingredient.

6.3 Tank Mixing Procedure

Mix labeled tank mixtures of this product with water as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. Add nonionic surfactant to the spray tank before completing the filling process.
8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive and water soluble liquid.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance.

Refer to the "Tank Mixing" section of "GENERAL INFORMATION" for additional precautions.

6.4 Mixing for Hand-held Sprayers

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

Spray Solution

Desired Volume	Amount of Roundup D-PAK 1/3%	2/3%	1 1/4%	3 1/2%	7%
1 Gal	1/2 oz	1 oz	1 2/3 oz	4 1/2 oz	9 oz

25 Gal	10 2/3 oz	21 oz	1 1/4 qt	3 1/2 qt	7 qt
100 Gal	1 1/3 qt	2 2/3 qt	1 1/4 gal	3 1/2 gal	7 gal

2 tablespoons = 1 fluid ounce

For use in knapsack sprayers, it is suggested that the recommended amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution.

6.5 Ammonium Sulfate

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product, particularly when tank mixed with certain residual herbicides on annual and perennial weeds. The equivalent rate of ammonium sulfate in a liquid formulation may also be used. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

NOTE: When using ammonium sulfate, apply this product at rates recommended in this label. Lower rates will result in reduced performance.

6.6 Colorants or Dyes

Agriculturally-approved colorants or marking dyes may be added to this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's recommendations.

6.7 Drift Control Additives

Drift control additives may be used with all equipment types, except wiper applicators, sponge bars and CDA equipment. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

7.0 APPLICATION EQUIPMENT AND TECHNIQUES

Do not apply this product through any type of irrigation system.

This product may be applied with the following application equipment:

Aerial--Fixed Wing and Helicopter

Ground Broadcast Spray--Boom or boomless systems, pull-type sprayer, floaters, pick-up sprayers, spray coupes and other ground broadcast equipment.

Hand-Held and High-Volume Spray Equipment--Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, handwands, mistblowers*, lances and other hand-held and motorized spray equipment used to direct the spray onto weed foliage.

*This product is not registered in California or Arizona for use in mistblowers.

Selective Equipment--Recirculating sprayers, shielded and hooded sprayers, wiper applicators and sponge bars.

Injection Systems--Aerial or ground injection sprayers.

***Controlled Droplet Applicator (CDA)**--Hand-held or boom-mounted applicators which produce a spray* consisting of a narrow range of droplet sizes.

Apply these spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes.

SPRAY DRIFT MANAGEMENT

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT *INJURY TO DESIRABLE PLANTS AND CROPS.*

DO NOT allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

7.1 Aerial Equipment

DO NOT apply this product using aerial spray equipment except under conditions as specified within this label.

Use the recommended rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. Unless otherwise specified, do not exceed 20 fluid ounces per acre. Aerial applications of this product may be made in annual cropping conventional tillage systems, fallow and reduced tillage systems and preharvest applications. Refer to the individual use area sections of this label for recommended volumes, application rates and further instructions.

Note: For aerial application in CALIFORNIA or ARKANSAS, refer to the federal supplemental label for aerial applications in that state for specific instructions, restrictions and requirements. For aerial applications, consult with state or local authorities regarding any additional requirements for aerial treatments.

AERIAL SPRAY DRIFT MANAGEMENT

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outermost nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.

2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

Importance of droplet size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces

drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see the **Wind, Temperature and Humidity**, and **Temperature Inversion** sections of this label).

Controlling droplet size

- **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- **Pressure:** Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy protection. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles:** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle orientation:** Orienting nozzles so that the spray is released backwards, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- **Boom Length:** For some use patterns, reducing the effective boom height to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller droplets, etc.).

Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature inversions

Applications should not occur during a temperature inversion because drift potential is high.

Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a

concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive areas

The product should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Avoid direct application to any body of water.

Ensure uniform application--To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

Banvel tank mixtures may not be applied by air in California.

7.2 Ground Broadcast Equipment

Use the recommended rates of this product in 3 to 40 gallons of water per acre as a broadcast spray unless otherwise specified. As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

7.3 Hand-Held and High-Volume Equipment

Apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff. Use coarse sprays only. Refer to Section 6.0 "MIXING" in this label for more information on preparing spray solutions of certain percentage content.

For control of weeds listed in the annual weeds rate tables, apply a 1/3 percent solution of this product to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall, or unless otherwise specified, use a 2/3 percent solution.

For best results, use a 1 1/4 percent solution on harder-to-control perennials, such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

When using application methods which result in less than complete coverage, use a 3 1/2 percent solution for annual and perennial weeds and a 3 1/2 to 7 percent solution for woody brush and trees.

7.4 Selective Equipment

This product may be applied through recirculating spray systems, shielded applicators, hooded sprayers, wiper applicators or sponge bars after dilution and thorough mixing with water to listed weeds growing in any noncrop site specified on this label and only when specifically recommended in cropping systems.

A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation, while spray solution not intercepted by weeds is collected and returned to the spray tank for reuse.

A shielded or hooded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.

A wiper or sponge applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution.

AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.

Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desirable vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam or splatter of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction.

Applications made above the crops should be made when the weeds are a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations or when the height of the weeds varies so that not all weeds are contacted. In these instances, repeat treatment may be necessary.

Shielded and hooded applicators

Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation. EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.

A hooded sprayer is a type of shielded applicator. The spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

Wiper applicators and sponge bars

Wiper applicators are devices that physically wipe appropriate amounts of this product directly onto the weed.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 mph. Performance may be

improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if 2 applications are made in opposite directions.

Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

Mix only the amount of solution to be used during a 1-day period, as reduced activity may result from use of leftover solutions. Clean wiper parts immediately after using this product by thoroughly flushing with water.

Nonionic surfactant at a rate of 10 percent by volume of total herbicide solution is recommended with all wiper applications.

For Rope or Sponge Wick Applicators--Mix 2.5 quarts of this product in 2 gallons of water plus 1 quart of nonionic surfactant. Apply this solution to weeds listed in this section.

For Porous-Plastic Applicators--Solutions ranging from 25 to 75 percent of this product in water may be used in porous-plastic wiper applicators.

When applied as recommended, this product CONTROLS the following weeds:

Corn, volunteer	Sicklepod
Panicum, Texas	Spanishneedles
Rye, common	Starbur, bristly
Shattercane	

When applied as recommended, this product SUPPRESSES the following weeds:

Beggarweed, Florida	Ragweed, common
Bermudagrass	Ragweed, giant
Dogbane, hemp	Smutgrass
Dogfennel	Sunflower
Guineagrass	Thistle, Canada
Johnsongrass	Thistle, musk
Milkweed	Vaseygrass
Nightshade, silverleaf	Velvetleaf
Pigweed, redroot	

7.5 Injection Systems

This product may be used in aerial or ground injection spray systems. It may be used as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix this product with the concentrate of other products when using injection systems.

7.6 CDA Equipment

The rate of this product applied per acre by vehicle-mounted CDA equipment must not be less than the amount recommended in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 2 to 15 gallons of water per acre.

For the control of annual weeds with hand-held CDA units, apply a 12.5 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 mph (20 fluid ounces per acre). For the

control of perennial weeds, apply a 12.5 to 25 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mph (40 fluid ounces to 2.5 quarts per acre).

Controlled droplet application equipment produces a spray pattern which is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

8.0 CROPS (Alphabetical)

This section is organized alphabetically by crop category. There may be several labeled crops listed in a crop category.

Unless otherwise specified, applications may be made to control any weeds listed in the annual, perennial and woody brush tables. Also refer to the "SELECTIVE EQUIPMENT" section.

For any crop not listed in this "CROPS" section, applications must be made at least 30 days prior to planting.

See Section 9.0 "ROUNDUP READY® CROPS" for use of this product in crops that contain the Roundup Ready gene. DO NOT use the instructions in this "CROPS" Section.

For broadcast postemergent treatments, do not harvest or feed treated vegetation for 8 weeks following application, unless otherwise specified.

When applying this product prior to transplanting crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to transplanting. Residues can be removed by a single 0.5 inch application of water, either by natural rainfall or via a sprinkler system. Applications made at emergence will result in injury or death to emerged seedlings.

8.1 Alfalfa, Clover, and Other Forage Legumes

LABELED CROPS: Alfalfa, clover, kudzu, lespedeza, lupin, sainfoin, trefoil, velvet bean, vetch, crown vetch, milk vetch

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, preharvest (Alfalfa only), spot treatment (alfalfa and clover only), wiper applicators (alfalfa and clover only), renovation

Preplant, Preemergence and At-planting

USE INSTRUCTIONS: This product may be applied before, during or after planting crops listed in this section. Applications must be made prior to emergence of the crop.

PRECAUTIONS, RESTRICTIONS: Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

Preharvest (Alfalfa only)

USE INSTRUCTIONS: This product may be used in declining alfalfa stands or any stand of alfalfa where crop destruction is acceptable. This application will severely injure or destroy the stand of alfalfa. This product will control annual and perennial weeds, including quackgrass, when applied prior to the harvest of alfalfa. The treated crop and weeds can be harvested and fed to livestock after 36 hours. Allow a minimum of 36 hours between application and harvest. Applications may be made at any time of the year. Make only one application to an existing stand of alfalfa per year. For control of quackgrass, apply in the spring, late

summer or fall when quackgrass is actively growing. Treatments for quackgrass must be followed by deep tillage for complete control.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 20 fluid ounces of this product per acre as a preharvest treatment. Do not use for alfalfa grown for seed, as a reduction in germination or vigor may occur.

Spot treatment or Wiper applications (Alfalfa and Clover only)

USE INSTRUCTIONS: This product may be applied as a spot treatment in alfalfa or clover. This product may be applied with wiper applicators to control or suppress the weeds listed under "WIPER APPLICATORS" in the "SELECTIVE EQUIPMENT" section of this label. Applications may be made in the same area at 30-day intervals.

PRECAUTIONS, RESTRICTIONS: For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled. No more than one-tenth of any acre should be treated at one time. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.

Renovation

USE INSTRUCTIONS: This product may be applied as a broadcast spray to existing stands of alfalfa, clover, and other labeled forage legumes. Labeled crops may then be planted into the treated area.

PRECAUTIONS, RESTRICTIONS: Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

8.2 Asparagus

TYPES OF APPLICATIONS: Preplant, preemergence, spot treatment, postharvest

Preplant, Preemergence

USE INSTRUCTIONS: This product may be applied prior to emergence of asparagus.

PRECAUTIONS, RESTRICTIONS: Do not apply within a week before the first spears emerge.

Spot treatment

USE INSTRUCTIONS: This product may be applied immediately after cutting, but prior to the emergence of new spears.

PRECAUTIONS, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. Do not harvest within 5 days of treatment.

Postharvest

USE INSTRUCTIONS: This product may be applied after the last harvest and all spears have been removed. If spears are allowed to regrow, delay application until ferns have developed. Delayed treatments should be applied as a directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears.

PRECAUTIONS, RESTRICTIONS: Direct contact of the spray with the asparagus may result in serious crop injury. Select and use recommended types of spray equipment for postemergence postharvest applications. A directed spray is any application where the spray pattern is aligned in such a way as to avoid direct contact of

the spray with the crop. A shielded spray is any application where a physical barrier is positioned and maintained between the spray and the crop to prevent contact of spray with the crop.

8.3 Cereal Crops

LABELED CROPS: Barley, Buckwheat, Millet (Pearl, Proso), Oats, Rice, Rye, Teosinte, Triticale, Wheat (All), Wild rice

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment (except rice), post-harvest, preharvest (wheat only), wiper applicators (wheat only), Red rice control prior to planting rice

Do not treat rice fields or levees when the field contains flood water.

Preplant, Preemergence and At-planting

USE INSTRUCTIONS: This product may be applied before, during or after planting of cereal crops. Applications must be made prior to emergence of the crop.

Spot treatment (except rice)

USE INSTRUCTIONS: This product may be applied as a spot treatment in cereal crops. Apply this product before heading in small grains.

PRECAUTIONS, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

Postharvest

USE INSTRUCTIONS: This product may be applied after harvest of cereal crops. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

PRECAUTIONS, RESTRICTIONS: For any crop not listed on this label, applications must be made at least 30 days prior to planting the next crop. Do not harvest or feed treated vegetation for 8 weeks following application.

Preharvest (wheat only)

USE INSTRUCTIONS: This product provides weed control when applied prior to harvest of wheat. Apply after the hard-dough stage of grain (30% or less grain moisture) and at least 7 days prior to harvest. Wheat stubble may be grazed immediately after harvest.

This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 20 fluid ounces of this product per acre. Do not apply to wheat grown for seed, as a reduction in germination or vigor may occur.

Wiper applications (wheat only)

USE INSTRUCTIONS: Wiper applications may be used in wheat. To control common rye or cereal rye, apply after the weeds have headed and achieved maximum growth, when the rye is at least 6 inches above the wheat crop.

PRECAUTIONS, RESTRICTIONS: Allow at least 35 days between application and harvest. Do not use roller applicators.

Red rice control prior to planting rice

USE INSTRUCTIONS: Apply 1 quart of this product in 5 to 10 gallons of water per acre. Flush fields prior to application to obtain uniform germination and stand of red rice. Make application when the majority of the red rice plants are in the 2-leaf stage and no more than 4 inches tall. Red rice plants with less than 2 true leaves may be only partially controlled.

PRECAUTIONS, RESTRICTIONS: Avoid spraying during low humidity conditions, as reduced control may result. Do not treat rice fields or levees when the fields contain water. Do not re-flood treated fields for 8 days following application.

8.4 Christmas Trees

TYPES OF APPLICATIONS: Post-directed, spot treatment, site preparation

Post-directed, Spot treatment

USE INSTRUCTIONS: This product may be used as a post-directed spray and spot treatment around established Christmas trees.

PRECAUTIONS, RESTRICTIONS: Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material. THIS PRODUCT IS NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN CHRISTMAS TREES. Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of established Christmas trees.

Site preparation

USE INSTRUCTIONS: This product may be used prior to planting Christmas trees.

PRECAUTIONS, RESTRICTIONS: Precautions should be taken to protect nontarget plants during site preparation applications.

8.5 Citrus Crops

LABELED CROPS: *Calamondin, Chironja, Citron, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime,* Mandarin (tangerine), Orange (All), Pummelo, Tangelo, Tangor

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment

NOTE: For general use directions, see the "TREE, NUT AND VINE (GENERAL)" section. The following directions are specific to citrus crops.

Florida and Texas only: For burndown or control of the weeds listed below, apply the recommended rates of this product in 3 to 30 gallons of water per acre. Where weed foliage is dense, use 10 to 30 gallons of water per acre.

For goatweed, apply 1 1/4 to 2 quarts of this product per acre. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 1 1/4 quarts per acre when plants are less than 8 inches tall and 2 quarts per acre when plants are greater than 8 inches tall. If goatweed is greater than 8 inches tall, the addition of Krovar™ II or Karmex™ may improve control. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Perennial weeds:

S = Suppression B = Burndown
PC = Partial control C = Control

WEED SPECIES	ROUNDUP D-PAK RATE PER ACRE 1/3 QT	1 1/4 QT	2 QT	3.2 QT
Bermudagrass	B	--	PC	C
Guineagrass				
Texas and Florida Ridge	B	C	C	C
Florida Flatwoods	--	B	C	C
Paragrass	B	C	C	C
Torpedograss	S	--	PC	C

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 1 day between last application and harvest.

8.6 Conservation Reserve Program (CRP)

TYPES OF APPLICATIONS: Renovation (rotating out of CRP), site preparation, postemergence weed control in dormant CRP grasses, wiper

Rotating out of CRP, Site preparation

USE INSTRUCTIONS: This product may be used to prepare CRP land for crop production.

Postemergence weed control in dormant CRP grasses, Wiper

USE INSTRUCTIONS: This product may be used to suppress competitive growth and seed production of undesirable vegetation in CRP acres. Such applications may be made with wiper application equipment or as a broadcast or spot treatment to dormant CRP grasses. For selective applications with broadcast spray equipment, apply 8 to 10 fluid ounces of this product per acre in early spring before desirable CRP grasses, such as crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

PRECAUTIONS, RESTRICTIONS: Some stunting of CRP perennial grasses will occur if broadcast applications are made when plants are not dormant.

8.7 Corn

TYPES OF CORN: Field corn, seed corn, sweet corn and popcorn

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, hooded sprayers, preharvest, post-harvest. For Roundup Ready corn, see the Roundup Ready Section of this label.

Preplant, Preemergence and At-Planting

USE INSTRUCTIONS: This product may be applied before, during or after planting corn. Applications must be made prior to emergence of the crop.

The following tank mixtures may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. For Southern states, do not apply in nitrogen solutions to tough-to-control grasses such as barnyardgrass, fall panicum, broadleaf signalgrass, annual ryegrass and any perennial weeds. See the map in the Annual Weeds section of this label for areas included in this recommendation.

ATRAZINE	EXTRAZINE™	LOROX™
BANVEL	FRONTIER™	MARKSMAN™
BICEP™	GUARDSMAN™	MICRO-TECH®
BICEP II	HARNESS®	PARTNER®
BLADEX/CYANAZINE	HARNESS XTRA	PROWL™
BROADSTRIKE™	HARNESS XTRA 5.6L	SIMAZINE
BULLET®	LARIAT®	SURPASS™
DUAL ™	LASSO®/ALACHLOR	SURPASS 100
DUAL II	LINEX™	TOPNOTCH™

For improved burndown, this product may be tank mixed with 2,4-D or dicamba.

Annual weeds--For difficult-to-control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 20 fluid ounces per acre in these tank mixtures. For other labeled annual weeds, apply 10 to 15 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 20 to 30 fluid ounces when weeds are over 6 inches tall.

PRECAUTIONS, RESTRICTIONS: Applications of 2,4-D or dicamba must be made at least 7 days prior to planting corn.

The tank mix recommendations in this section are not registered in California.

Hooded Sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of corn. Only hooded sprayers that completely enclose the spray pattern may be used.

When applying to corn that is grown on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows.

Follow these requirements:

- The spray hoods must be operated on the ground or skimming across the ground.
- Do not apply more than 20 fluid ounces of this product per acre per application.

- Corn must be at least 12 inches tall, measured without extending leaves.
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood should be 30 inches.
- Maximum tractor speed: 5 mph.
- Maximum wind speed: 10 mph.
- Use low-drift nozzles.

Crop injury may occur when the foliage of treated weeds comes into direct contact with leaves of the crop. Do not apply this product when the leaves of the crop are growing in direct contact with weeds to be treated. Droplets, mist, foam or splatter of the herbicide solution may contact the crop and cause discoloration, stunting or destruction.

PRECAUTIONS, RESTRICTIONS: Contact of this product in any manner to any vegetation to which treatment in not intended may cause damage. Such damage shall be the sole responsibility of the applicator. Allow a minimum of 7 days between application and grazing or harvest. Do not apply more than 2 quarts of this product per acre per year for hooded sprayer applications.

Spot treatment

USE INSTRUCTIONS: For spot treatments, apply this product prior to silking of corn.

PRECAUTIONS, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

Preharvest

USE INSTRUCTIONS: Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed). For ground applications, apply up to 2 quarts of this product per acre. For aerial applications, apply up to 20 fluid ounces of this product per acre..

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between application and harvest It is not recommended that corn grown for seed be treated because a reduction in germination or vigor may result.

Post-harvest

USE INSTRUCTIONS: This product may be applied after harvest of corn. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

PRECAUTIONS, RESTRICTIONS: Do not harvest or feed treated vegetation for 8 weeks following application.

8.8 Cotton

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, hooded sprayer, selective equipment, spot treatment, preharvest. For Roundup Ready cotton, see the Roundup Ready Section of this label.

Preplant, Preemergence, and At-planting

USE INSTRUCTIONS: This product may be applied before, during or after planting cotton. Applications must be made prior to emergence of the crop.

Hooded sprayer, Selective equipment

USE INSTRUCTIONS: This product may be applied through hooded sprayers, recirculating sprayers, shielded applicators or wiper applicators in cotton.

PRECAUTIONS, RESTRICTIONS: See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment. Allow at least 7 days between application and harvest.

Spot treatment

USE INSTRUCTIONS: For spot treatments, apply this product prior to boll opening of cotton.

PRECAUTIONS, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

Preharvest

USE INSTRUCTIONS: This product provides weed control and cotton regrowth inhibition when applied prior to harvest of cotton. For weed control, apply at rates given in the annual, perennial and woody brush tables. Apply 10 to 40 fluid ounces of this product per acre for cotton regrowth inhibition. Allow a minimum of 7 days between application and harvest of cotton.

This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

Apply after sufficient bolls have developed to produce the desired yield of cotton. Applications made prior to this time could affect maximum yield potential.

This product may be tank mixed with DEF™ 6, Folex™, or Prep™ to provide additional enhancement of cotton leaf drop.

PRECAUTIONS, RESTRICTIONS: Do not feed or graze treated cotton forage or hay following preharvest applications. Applications up to 40 fluid ounces per acre per year of this product may be applied by ground or air at preharvest timing. Do not exceed this amount. Do not apply to cotton grown for seed, as a reduction in germination or vigor may occur.

8.9 Fallow Systems

TYPES OF APPLICATIONS: Chemical fallow, preplant fallow beds, aid-to-tillage

Chemical fallow

USE INSTRUCTIONS: This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, applications must be made at least 30 days prior to planting. This product may be used as a substitute for tillage to control annual weeds in fallow

fields. Also, broadcast or spot treatments will control or suppress many perennial weeds in fallow fields. Ground or aerial application equipment may be used. Tank mixtures with 2,4-D and dicamba may be used.

PRECAUTIONS, RESTRICTIONS: Do not apply Banvel tank mixtures by air in California. Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures. Some crop injury may occur if Banvel is applied within 45 days of planting.

Preplant fallow beds

USE INSTRUCTIONS: This product may be applied to fallow beds prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, applications must be made at least 30 days prior to planting. This product will control weeds listed in the annual, perennial and woody brush tables.

In addition, 8 fluid ounces of this product plus 2 to 4 oz of Goal™ 2XL per acre will control the following weeds with the maximum height or length indicated: 3" -- common cheeseweed, chickweed, groundsel; 6" -- London rocket, shepherd's-purse.

10 fluid ounces of this product plus 2 to 4 oz of Goal 2XL per acre will control the following weeds with the maximum height or length indicated: 6" -- common cheeseweed, groundsel, marestail (*Conyza canadensis*), 12" -- chickweed, London rocket, shepherd's-purse.

Aid-to-tillage

USE INSTRUCTIONS: This product may be used in conjunction with tillage practices in fallow systems or preplant to labeled crops to control downy brome, cheat, volunteer wheat, tansy mustard and foxtail. Apply 5 fluid ounces of this product in 3 to 10 gallons of water per acre. Make applications before weeds are 6 inches in height. Application must be followed by conventional tillage practices no later than 15 days after treatment and before regrowth occurs. Allow at least 1 day after application before tillage.

PRECAUTIONS, RESTRICTIONS: Tank mixtures with residual herbicides may result in reduced performance.

8.10 Grain Sorghum (Milo)

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, wiper applicators, hooded sprayers, preharvest, post-harvest

Preplant, Preemergence, At-planting

USE INSTRUCTIONS: This product may be applied before, during or after planting grain sorghum. Applications must be made prior to emergence of the crop.

Spot treatment and Wiper applications

USE INSTRUCTIONS: This product may be applied as a spot treatment in grain sorghum. Make spot treatments before heading of milo. This product may be applied with wiper applicators to control or suppress the weeds listed under "WIPER APPLICATORS" in the "SELECTIVE EQUIPMENT" section of this label.

PRECAUTIONS, RESTRICTIONS: For spot treatment, do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

For wiper applicators, allow at least 40 days between application and harvest. Do not use roller applicators. Do not feed or graze treated milo fodder. Do not ensile treated vegetation.

Hooded Sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of milo. Only hooded sprayers that completely enclose the spray pattern may be used.

When applying to milo that is grown on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows.

Follow these requirements:

- The spray hoods must be operated on the ground or skimming across the ground.
- Do not apply more than 20 fluid ounces of this product per acre per application.
- Milo must be at least 12 inches tall, measured without extending leaves. Treat before milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood should be 30 inches.
- Maximum tractor speed: 5 mph.
- Maximum wind speed: 10 mph.
- Use low-drift nozzles.

Crop injury may occur when the foliage of treated weeds comes into direct contact with leaves of the crop. Do not apply this product when the leaves of the crop are growing in direct contact with weeds to be treated. Droplets, mist, foam or splatter of the herbicide solution may contact the crop and cause discoloration, stunting or destruction.

PRECAUTIONS, RESTRICTIONS: Contact of this product in any manner to any vegetation to which treatment in not intended may cause damage. Such damage shall be the sole responsibility of the applicator. Do not graze or feed milo forage or fodder following applications of this product through hooded sprayers. Do not apply more than 2 quarts of this product per acre per year for hooded sprayer applications.

Preharvest

USE INSTRUCTIONS : Make applications at 30% grain moisture or less.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 40 fluid ounces of this product per acre. Allow a minimum of 7 days between application and harvest of sorghum. It is not recommended that sorghum grown for seed be treated, as a reduction in germination or vigor may occur. The use of this product for preharvest grain sorghum (Milo) is not registered in California

Post-harvest

USE INSTRUCTIONS: This product may be applied after harvest of grain sorghum. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

This product may be applied to grain sorghum (milo) stubble following harvest to suppress or control regrowth. Apply 20 fluid ounces of this product per acre for control, or 15 fluid ounces of this product per acre for suppression.

PRECAUTIONS, RESTRICTIONS: Do not harvest or feed treated vegetation for 8 weeks following application.

8.11 Grass Seed Production

TYPES OF APPLICATIONS: Preplant, preemergence, renovation, site preparation, shielded sprayers, wiper applicators, spot treatments, creating rows in annual ryegrass

USE INSTRUCTIONS: This product may be applied before, during, or after planting or renovation of turf or forage grass areas grown for seed production. Applications MUST be made prior to the emergence of the crop to avoid crop injury. For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses, such as bermudagrass, summer or fall applications provide best control.

PRECAUTIONS, RESTRICTIONS: Do not feed or graze treated areas for 8 weeks following application. Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts.

Shielded sprayers

USE INSTRUCTIONS: Apply 22 fluid ounces to 2 quarts of this product as a broadcast spray in 10 to 20 gallons of water per acre to control weeds in the rows. Uniform planting in straight rows aid in shielded sprayer applications. Best results are obtained when the grass seed crop is small enough to easily pass by or through the protective shields.

PRECAUTIONS, RESTRICTIONS: Contact of this product in any manner to any vegetation to which treatment in not intended may cause damage. Such damage shall be the sole responsibility of the applicator.

Wiper Applications

PRECAUTIONS, RESTRICTIONS: Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators should be adjusted so that the wiper contact point is at least 2 inches above the desirable vegetation. Weeds should be a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when height of weeds varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary. Better results may be obtained if 2 applications are made in opposite directions.

Spot Treatments

USE INSTRUCTIONS: Use a 2/3 to 1 percent solution.

PRECAUTIONS, RESTRICTIONS: Apply this product prior to heading of grasses. Do not treat more than 10 percent of the total field to be harvested. The crop receiving the spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason.

Creating Rows in Annual Ryegrass

USE INSTRUCTIONS: Use 10 to 20 fluid ounces of this product per acre mixed with water. Use the higher rate when the ryegrass is greater than 6 inches tall. Best results are obtained when applications are made before the ryegrass reaches 6 inches in height.

PRECAUTIONS, RESTRICTIONS: Set nozzle heights to allow the establishment of the desired row spacing while preventing spray droplets, spray fines, or drift to contact the ryegrass plants not treated. Use of low pressure nozzles, or drop nozzles designed to target the application over a narrow band are recommended.

Grower assumes all responsibility for crop losses from misapplication.

8.12 Herbs

LABELED CROPS: Peppermint, spearmint

USE INSTRUCTIONS: This product may be used as a spot treatment in spearmint and peppermint. Apply spray-to-wet with hand-held equipment, such as backpack and knapsack sprayers, pump-up pressure sprayers, hand-guns, hand-wands or any other hand-held or motorized spray equipment used to direct the spray solution on to a limited area.

PRECAUTIONS, RESTRICTIONS: Allow at least 7 days between application and harvest. Further applications may be made in the same area at 30 day intervals. No more than one-tenth of any acre should be treated at one time. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for this reason.

8.13 Pastures

TYPES OF PASTURES: Bahiagrass, bermudagrass, bluegrass, brome, fescue, orchardgrass, ryegrass, timothy, wheatgrass, alfalfa and clover

TYPES OF APPLICATIONS: Spot treatment, wiper application, preplant, preemergence, pasture renovation

Spot treatment and Wiper application

USE INSTRUCTIONS: This product may be applied as a spot treatment or with wiper applicators in pastures. Applications may be made in the same area at 30-day intervals.

PRECAUTIONS, RESTRICTIONS: For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled. No more than one-tenth of any acre should be treated at one time. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.

Preplant, Preemergence and Pasture renovation

USE INSTRUCTIONS: This product may be applied prior to planting or emergence of forage grasses and legumes. In addition, this product may be used to control perennial pasture species listed on this label prior to re-planting.

PRECAUTIONS, RESTRICTIONS: Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

8.14 Peanuts

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting

USE INSTRUCTIONS: This product may be applied before, during or after planting peanuts. Applications must be made prior to the emergence of the crop.

8.15 Small Fruits and Berries

LABELED CROPS: Blackberry, Blueberry, Boysenberry, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Huckleberry, Loganberry, Olallieberry, Raspberry (Black, Red), Youngberry

TYPES OF APPLICATIONS: Preplant, preemergence, directed spray (except cranberry), wiper application

USE INSTRUCTIONS: This product may be applied as a preplant or preemergence broadcast application or as a wiper application for crops listed in this section. Directed sprays may be applied to any crop except cranberries. Applications may be made to dry ditches in cranberry fields, but directed sprays around the base of the plants is not permitted. For wick or wiper applicators, mix 2/3 gallon of this product in 4 gallons of water to prepare a 20 percent solution. In severe infestations, reduce equipment ground speed to ensure that adequate amounts of this product are wiped on the weeds. A second treatment in the opposite direction may be beneficial.

PRECAUTIONS, RESTRICTIONS: Do not permit herbicide solution to contact desirable vegetation, including green shoots, canes or foliage. Allow a minimum of 30 days between last application and harvest of cranberries. For other small fruits and berries, allow a minimum of 14 days between last application and harvest.

8.16 Soybeans

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, preharvest, selective equipment. For Roundup Ready soybeans, see the Roundup Ready Section of this label.

Preplant, Preemergence and At-planting

USE INSTRUCTIONS: This product may be applied before, during or after planting soybeans. Applications must be made prior to emergence of the crop.

The following tank mixtures may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

CANOPY™	LASSO/ALACHLOR	PROWL
COMMAND™	LINEX	PURSUIT™
DUAL	LOROX/LINURON	PURSUIT PLUS
DUAL II	LOROX PLUS	SCEPTER™
FRONTIER	MICRO-TECH	SENCOR™/LEXONE™
FUSION™	PARTNER	SQUADRON™
GEMINI™	PREVIEW™	TURBO™

For improved burndown, this product may be tank-mixed with 2,4-D or 2,4-DB. See the 2,4-D label for intervals between application and planting.

Annual weeds: For difficult-to-control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 20 fluid ounces per acre in these tank mixtures. For other labeled annual weeds, apply 10 to 15 fluid ounces

of this product per acre when weeds are less than 6 inches tall, and 20 to 30 fluid ounces when weeds are over 6 inches tall.

PRECAUTIONS, RESTRICTIONS: The tank mix recommendations in this section are not registered in California.

Spot treatment

USE INSTRUCTIONS: For spot treatments, apply this product prior to initial pod set in soybeans.

PRECAUTIONS, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

Preharvest

USE INSTRUCTIONS: This product provides weed control when applied prior to harvest of soybeans.

Apply at rates given in the annual, perennial and woody brush tables. This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

Apply after pods have set and lost all green color. Allow a minimum of 7 days between application and harvest of soybeans. Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

PRECAUTIONS, RESTRICTIONS: Do not graze or harvest treated crop for livestock feed within 25 days of last preharvest application. DO NOT APPLY MORE THAN 3.75 QUARTS PER ACRE OF THIS PRODUCT FOR PREHARVEST APPLICATIONS. DO NOT APPLY MORE THAN 20 FLUID OUNCES PER ACRE OF THIS PRODUCT BY AIR. Do not apply to soybeans grown for seed as a reduction in germination or vigor may occur.

Selective equipment

USE INSTRUCTIONS: This product may be applied through recirculating sprayers, shielded applicators, hooded sprayers, wiper applicators or sponge bars in soybeans. Allow at least 7 days between application and harvest.

PRECAUTIONS, RESTRICTIONS: See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

8.17 Sugarcane

TYPES OF APPLICATIONS: Preplant, preemergence, spot treatment, fallow, hooded sprayers

Preplant, Preemergence

USE INSTRUCTIONS: This product may be applied in or around sugarcane fields or in fields prior to the emergence of plant cane.

PRECAUTIONS, RESTRICTIONS: Do not apply to vegetation in or around ditches, canals or ponds containing water to be used for irrigation.

Spot treatment

USE INSTRUCTIONS: This product may be applied as a spot treatment in sugarcane. For control of volunteer or diseased sugarcane, make a 2/3 percent solution of this product in water and spray to wet the foliage of vegetation to be controlled. Volunteer or diseased sugarcane should have at least 7 new leaves.

PRECAUTIONS, RESTRICTIONS: Avoid spray contact with healthy cane plants since severe damage or destruction may result. Do not feed or graze treated sugarcane foliage following application.

Fallow treatments

USE INSTRUCTIONS: This product may be used as a replacement for tillage in fields that are lying fallow between sugarcane crops. This product may also be used to remove the last stubble of ratoon cane. For removal of last stubble of ratoon cane, apply 2.5 to 3.2 quarts of this product in 10 to 40 gallons of water per acre to new growth having at least 7 new leaves. Allow 7 or more days after application before tillage.

Hooded sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of sugarcane. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for guidance on the use of hooded sprayers.

When applying to sugarcane that is grown on raised beds, ensure that the hood is designed to completely enclose the spray. If necessary, extend the front and rear flaps of the hoods to reach the ground in furrows between the rows.

PRECAUTIONS, RESTRICTIONS: Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting the crop. Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Do not allow treated weeds to come into contact with the crop. Droplets, mist, foam or splatter of the herbicide solution settling on the crop may result in discoloration, stunting or destruction. Such damage shall be the sole responsibility of the applicator.

8.18 Sunflowers

TYPES OF APPLICATIONS: Preplant, preemergence

USE INSTRUCTIONS: This product may be applied before, during or after planting sunflowers. Applications must be made prior to emergence of the crop.

A tank mixture with Prowl may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 20 fluid ounces of this product per acre for sunflowers. Make only one preplant or preemergent application per year. Do not feed or graze sunflower forage following application of this product.

8.19 Tree and Vine Crops (General)

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), perennial grass suppression , selective equipment (except kiwi),

NOTE: this section gives general directions that apply to all citrus crops, tree fruits, tree nuts and vine crops. See the individual crop sections for instructions, preharvest intervals, precautions and restrictions for specific crops.

This product may be applied in middles, strips and for general weed control in established citrus groves, tree fruit and tree nut orchards, and vineyards. Apply at 10 fluid ounces to 3.2 quarts per acre. Repeat applications may be made up to a maximum of 6.7 quarts per acre per year. This product may also be used for site preparation prior to transplanting these crops. Allow a minimum of 3 days between application and transplanting. Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high-volume wands, lances, orchard guns or with wiper applicator equipment, except as directed.

Middles (between rows)

USE INSTRUCTIONS: This product will control or suppress annual and perennial weeds and ground covers growing between the rows of labeled tree and vine crops. If weeds are under drought stress, irrigate prior to application. Reduced control may result if weeds have been mowed prior to application.

A tank mixture of this product plus Goal 2XL may be used for annual weeds in middles between rows of citrus crops, tree fruits, tree nuts and vine crops. This mixture is recommended when weeds are stressed or growing in dense populations. 10 to 20 fluid ounces per acre of this product plus 3 to 12 fluid ounces per acre of Goal 2XL will control annual weeds with a maximum height or diameter of 6 inches, including crabgrass, hairy fleabane (*Conyza bonariensis),* common groundsel, junglerice, common lambsquarters, redroot pigweed, London rocket, common ryegrass, shepherd's-purse, annual sowthistle, common cheeseweed (malva), filaree (suppression), horseweed/marestail (*Conyza canadensis),* stinging nettle and common purslane (suppression). 8 to 20 fluid ounces per acre of this product plus 3 to 12 fluid ounces per are of Goal 2XL will control common cheeseweed (malva) with a maximum height or diameter of 3 inches.

Strips (in rows)

USE INSTRUCTIONS: This product may be applied in rows of tree or vine crops and may also be tank mixed with the following products:

DEVRINOL™ 50 DF	PRINCEP CALIBER ™90
DIREX™ 4L	SIMAZINE 4L
GOAL 2XL	SIMAZINE 80W
KARMEX DF	SIM-TROL™ 4L;
KROVAR I	SOLICAM™ DF
KROVAR II	SURFLAN™ AS
PROWL	SURFLAN 75W

Do not apply these tank mixtures in Puerto Rico.

Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Apply 10 fluid ounces to 3.2 quarts of this product per acre in these tank mixtures. Use rates at the higher end of the recommended rate range when weeds are stressed, growing in dense populations or are greater than 12 inches tall.

Perennial grass suppression

This product will suppress perennial grasses such as bahiagrass, bermudagrass, tall fescue, orchardgrass, Kentucky bluegrass, and quackgrass that are grown as ground covers in tree and vine crops.

For suppression of tall fescue, fine fescue, orchardgrass and quackgrass, apply 5 fluid ounces of this product in 10 to 20 gallons of water per acre.

For suppression of Kentucky bluegrass covers, apply 4 fluid ounces of this product per acre. Do not add ammonium sulfate.

For best results, mow cool season grass covers in the spring to even their height and apply this product 3 to 4 days after mowing.

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 4fluid ounces of this product in 10 to 25 gallons of water per acre. Apply 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

For suppression up to 120 days, apply 2.5 fluid ounces of this product per acre, followed by an application of 1 to 3 fluid ounces per acre about 45 days later. Make no more than 2 applications per year.

For burndown of bermudagrass, apply 20 to 40 fluid ounces of this product in 3 to 20 gallons of water per acre. Use this treatment only if reduction of the bermudagrass stand can be tolerated. When burndown is required prior to harvest, allow at least 21 days to ensure sufficient time for burndown to occur.

For suppression of bermudagrass, apply 4 to 10 fluid ounces of this product per acre east of the Rocky Mountains and 10 fluid ounces of this product per acre west of the Rocky Mountains. Apply in a total spray volume of 3 to 20 gallons per acre, no sooner than 1 to 2 weeks after full green-up. If the bermudagrass is mowed prior to application, maintain a minimum of 3 inches in height. Sequential applications may be made when regrowth occurs and bermudagrass injury and stand reduction can be tolerated. East of the Rocky Mountains, rates of 4 to 6 fluid ounces per acre should be used in shaded conditions or where a lesser degree of suppression is desired.

Selective equipment (except kiwi)

Shielded and wiper applicators may be used in tree crops and grapes. Refer to the individual crop sections for time interval between application and harvest.

PRECAUTIONS, RESTRICTIONS: For citron and olives, apply as a post-directed spray only. Avoid painting cut stumps with this product as injury resulting from root grafting may occur in adjacent trees.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE SOLUTION, SPRAY, DRIFT OR MIST WITH FOLIAGE OR GREEN BARK OF TRUNK, BRANCHES, SUCKERS, FRUIT OR OTHER PARTS OF TREES AND VINES. CONTACT OF THIS PRODUCT WITH OTHER THAN MATURED BROWN BARK CAN RESULT IN SERIOUS CROP DAMAGE.

8.20 Tree Fruits

LABELED CROPS: Apple, Apricot, Cherry (Sweet, Sour), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (All), Quince

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment

NOTE: For general use directions, see the "TREE, NUT AND VINE (GENERAL)" section. The following directions are specific to tree fruits.

Restrictions on application equipment

For cherries, any application equipment listed in this section may be used in all states.

Any application equipment listed in this section may be used in apricots, nectarines, peaches and plums/prunes growing in Arizona, California, Colorado, Idaho, Kansas, Kentucky, New Jersey, North Dakota, Oklahoma, Oregon, Texas, Utah and Washington, except for peaches grown in the states specified in the following paragraph. In all other states use wiper equipment only.

For PEACHES grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee only, apply with a shielded boom sprayer or shielded wiper applicator, which prevents any contact of this product with the foliage or bark of trees. Apply no later than 90 days after first bloom. Applications made after this time may result in severe damage. Remove suckers and low-hanging limbs at least 10 days prior to application. Avoid applications near trees with recent pruning wounds or other mechanical injury. Apply only near trees which have been planted in the orchard for 2 or more years. EXTREME CARE MUST BE TAKEN TO ENSURE NO PART OF THE PEACH TREE IS CONTACTED.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 1 day between last application and harvest for apple, crabapple, loquat, mayhaw, pear, quince.

Allow a minimum of 17 days between last application and harvest for apricot, cherry, nectarine, olive, peach, plum/prune.

8.21 Tree Nuts

LABELED CROPS: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory nut, Macadamia, Pecan, Pistachio, Walnut (Black, English)

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment

NOTE: For general use directions, see the "TREE, NUT AND VINE (GENERAL)" section. The following directions are specific to tree nuts.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 3 days between last application and harvest of tree nuts.

8.22 Tropical Crops

LABELED CROPS: Atemoya, Avocado, Banana, Barbados Cherry (acerola), Breadfruit, Canistel, Carambola, Cherimoya, Cocoa beans, Coconuts, Coffee, Dates, Durian, Figs, Guava, Jaboticaba, Jackfruit, Longan, Lychee, Mango, Mangosteen, Marmaladebox (genip), Papaya, Passion fruit, Persimmon, Pineapple, Plantain, Pomegranate, Rambutan, Sapodilla, Sapote (black, mamey, white), Soursop, Sugar apple, Tamarind, Tea.

USE INSTRUCTIONS: This product may be applied for general weed control or for site preparation prior to transplanting crops listed in this section. In coffee and banana, delay applications 3 months after transplanting to allow the new coffee or banana plant to become established.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 1 day between last application and harvest of banana, guava, papaya and plantain. Allow a minimum of 14 days between last application and harvest of acerola, atemoya, avocado, breadfruit, canistel, carambola, cherimoya, cocoa beans, coconuts, dates, figs, genip, jaboticaba, jackfruit, longan, lychee, mango, mayhaw, passion fruit, persimmon, pomegranate, sapodilla, sapote, soursop, sugar apple, tamarind, and tea. Allow a minimum of 28 days between last application and harvest of coffee.

Do not feed or graze treated pineapple forage following application.

8.23 Vegetable Crops

LABELED CROPS: Amaranth, Arrugula, Artichoke (Jerusalem), Beans (All), Beet greens, Garden beets, Broccoli (All), Brussels sprouts, Cabbage (All), Cabbage (Chinese), Cantaloupe, Cardoon, Cavalo Broccolo, Carrot, Cauliflower, Casaba melon, Celery, Celery (Chinese), Celeriac, Celtuce, Chard (Swiss), Chayote, Chervil, Chick peas, Chicory, Chrysanthemum, Collards, Corn salad, Crenshaw melon, Cress, Cucumber, Dandelion, Dock (sorrel), Eggplant, Endive, Fennel (florence), Garlic, Gherkin, Ginseng, Gourds, Ground cherry, Guar, Honeydew melon, Honey ball melon, Horseradish, Kale, Kohlrabi, Leek, Lentils, Lettuce, Mango melon, Melons (All), Mizuna, Muskmelon, Mustard greens, Okra, Onion, Oriental radish, Parsley, Parsnips, Peas (All), Pepinos, Pepper (All), Persian melon, Potato (Irish), Pumpkin, Purslane, Radish, Rape greens, Rhubarb, Rutabaga, Salsify, Shallot, Spinach (All), Mustard Spinach, Squash (Summer, Winter), Sugar beets, Sweet potato, Tomatillo, Tomato, Turnip, Watercress, Watermelon, Yams.

USE INSTRUCTIONS: This product may be applied prior to the emergence of direct seeded vegetables or prior to transplanting vegetables, except that for the following crops, apply only prior to planting. Allow at least 3 days between application and planting of cantaloupe, casaba melon, crenshaw melon, cucumber, eggplant, gherkin, gourds, ground cherry, honeydew melon, honey ball melon, mango melon, melons (all), muskmelon, pepper (all), persian melon, pumpkin, squash (summer, winter), tomatillo, watercress, and watermelon.

PRECAUTIONS, RESTRICTIONS: When applying this product prior to transplanting crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to transplanting. Residues can be removed by a single 0.5 inch application of water, either by natural rainfall or via a sprinkler system. Applications made at emergence will result in injury or death to emerged seedlings.

Wiper applicators may be used in rutabagas. Allow at least 14 days between application and harvest.

8.24 Vine Crops

LABELED CROPS: Grapes (raisin, table, wine), Kiwi fruit

TYPES OF APPLICATIONS: General weed control, middles (between rows), strips (in row), selective equipment

NOTE: For general use directions, see the "TREE, NUT AND VINE (GENERAL)" section. The following directions are specific to vine crops.

Applications should not be made when green shoots, canes or foliage are in the spray zone.

In the northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury, or make applications with shielded sprayers or wiper equipment.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 14 days between last application and harvest.

9.0 Roundup Ready® Crops

The following instructions include all applications which can be made onto Roundup Ready® crops during the complete cropping season. DO NOT combine these instructions with other recommendations made for crop varieties which do not contain the Roundup Ready gene, in the CROPS (ALPHABETICAL) Section 8 of this label.

MONSANTO COMPANY RECOMMENDS USE OF THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON CROP VARIETIES DESIGNATED AS CONTAINING THE ROUNDUP READY® GENE.

Applying this product to crop varieties which are not designated as Roundup Ready will result in severe crop injury and yield loss. Avoid contact with foliage, green stems, or fruit of crops, or any desirable plants which do not contain the Roundup Ready gene, since severe injury or destruction will result.

The Roundup Ready designation indicates that the crop variety contains a patented gene which provides tolerance to Monsanto's Roundup brand herbicides. Information on Roundup Ready crop varieties may be obtained from your seed supplier or Monsanto representative.

SPRAY DRIFT MANAGEMENT

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

For proper stewardship of aerial applications over-the-top of Roundup Ready crops, Monsanto recommends that growers and applicators read and follow all precautions and procedures contained in the use guide "A Guide to On-Target Aerial Application" available by calling 1-800-ROUNDUP (1-800-768-6387) or on the internet at www.FARMSOURCE™ .com.

See the MIXING and APPLICATION EQUIPMENT AND TECHNIQUES sections of this label for additional directions and restrictions on the application of this product.

DO NOT exceed a maximum rate of 20 fluid ounces per acre of this product when making applications by air unless otherwise directed. For aerial application in California or Arkansas, refer to the Federal supplemental label for aerial applications in those states for specific instructions, restrictions and requirements.

Tank mixtures with other herbicides, insecticides, or fungicides may result in reduced weed control or crop injury and are NOT recommended for over-the-top applications of this product.

Sprayer Preparation: It is important that sprayer, lines, filters, and mixing equipment be clean and free of pesticide residue before making applications of this product to Roundup Ready crops. Follow the cleaning procedures specified on the label of the product(s) previously used. Many crops can be very sensitive to herbicides at extremely low concentrations and care should be taken to thoroughly clean all equipment prior to use.

NOTE: The following recommendations are based on a clean start at planting by using a burn down application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a

preplant burn-down treatment of 15 to 40 fluid ounces per acre of this product is recommended to control existing weeds prior to crop emergence.

There are no rotational crop restrictions following the application of this product.

9.1 Canola with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, preemergence, postemergence

USE INSTRUCTIONS:

Maximum Allowable Combined Application Quantities Per Season	
1. Preplant and preemergence applications	40 fluid ounces per acre
2. Total in-crop application from emergence to 6 leaf	20 fluid ounces per acre

For ground applications with broadcast equipment, apply this product in 5 to 20 gallons of spray solution per acre. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment use flat fan nozzles. Check for even distribution of spray droplets.

For aerial applications apply this product in 3 to 15 gallons of water per acre.

Preplant or Preemergent applications: This product may be applied by aerial or ground application equipment prior to planting or emergence of canola.

Over-the-top applications: This product may be applied by aerial or ground application equipment postemergence to Roundup Ready canola from emergence through the six leaf stage of development. To maximize yield potential spray canola early to eliminate competing weeds. Any single over-the-top broadcast application should not exceed 10 fluid ounces per acre. No more than two over-the-top broadcast applications may be made from crop emergence through the six leaf stage of development. Sequential over-the-top applications of this product must be at least 10 days apart.

Weeds controlled. For specific rates of application and instructions for control of various annual and perennial weeds, refer to the annual and perennial weed rate tables in this booklet.

Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control. The second application should be made after some regrowth has occurred and at least 10 days after a previous application of this product.

This product will control or suppress, most perennial weeds. For some perennial weeds, repeat applications may be required to eliminate crop competition throughout the growing season.

PRECAUTIONS, RESTRICTIONS: See section 9.0 for general precautionary instructions for use in Roundup Ready crops. Allow a minimum of 60 days between last application and canola harvest. DO NOT use this product on canola with the roundup ready gene planted in the following states: Alabama, Delaware, Florida, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.

9.2 Corn with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, postemergence, spot treatment, preharvest, post-harvest

USE INSTRUCTIONS:

When applied as directed, this product controls labeled annual grass and broadleaf weeds in Roundup Ready corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more application of this product. Applications should be made to actively growing weeds before they reach the maximum size listed in the annual and perennial weed rate tables. Refer to the "MIXING" section for proper use instructions.

This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first. Single in-crop applications of this product are not to exceed 20 fluid ounces per acre. Sequential in-crop applications of this product from emergence through the V8 stage or 30 inches must not exceed 40 fluid ounces per acre per growing season.

Maximum Allowable Application Rates

1.	Combined total per year for all applications	5 quarts per acre
2.	Preplant, Preemergence applications	3.2 quarts per acre
3.	Total in-crop applications from emergence through the V8 stage or 30 inches	40 fluid ounces per acre
4.	Maximum preharvest application rate after maximum kernal fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest	20 fluid ounces per acre

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product under hard water conditions, drought conditions or when tank mixed with Bullet®, Micro-Tech® or Partner® Herbicides. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion. The addition of other additives, including fertilizers and micronutrients are not recommended with this product since this may result in increased potential for crop injury.

For ground applications: Use the recommended rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select correct nozzles and spray pressure to avoid spraying a fine mist. Check for even distribution of spray droplets.

For aerial applications: Use the recommended rates of this product in 3 to 15 gallons of spray solution per acre.

PRECAUTIONS, RESTRICTIONS: See section 9.0 for general precautionary instructions for use in Roundup Ready crops. Allow a minimum of 50 days between application of this product and harvest of corn forage and 7 days between application and harvest of corn grain. Allow a minimum of 10 days between in-crop applications of this product.

Weeds Control Recommendations

Apply 15 to 20 fluid ounces of Roundup D-PAK herbicide per acre for control of labeled grasses and broadleaf weeds in conventional and no-till corn production systems. Refer to the "ANNUAL WEED RATE TABLE" for rate recommendations for specific annual weeds. Roundup D-PAK herbicide applied at up to 20 fluid ounces per acre will control or suppress the growth of perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, nutsedge, quackgrass, rhizome

johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly. For additional information on perennial weeds, see the "PERENNIAL WEED RATE TABLE".

Preemergence followed by Postemergence Weed Control Program
This product may be applied postemergence in-crop following any labeled preemergence herbicide application. The post application of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. A single in-crop application of this product at the recommended rate will provide control of emerged weeds listed on the label. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches (free standing), whichever comes first.

Postemergence Only Weed Control Program
This product may be applied alone as a postemergence in-crop application to provide control of emerged weeds listed on the label. The postemergence application of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. If new flushes of weeds occur, a sequential application of this product at 15 to 20 fluid ounces per acre will control the labeled grasses and broadleaf weeds. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage or until corn height reaches 30 inches (free standing), whichever comes first.

This product may be applied in tank mixture with a labeled rate of Harness®, Harness® Xtra, Harness® Xtra 5.6L, Micro-Tech®, Bullet®, Partner®, Permit® or Atrazine. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum recropping interval and rotational guidelines - the more restrictive requirements apply.

Tank Mix Partner	Maximum Height Of Corn For Application
Harness Harness Xtra Harness Xtra 5.6	11 inches
Bullet* Micro-Tech* Partner*	5 inches
Permit	24 inches
Atrazine	12 inches

*Bullet, Micro-Tech and Partner are not registered for use as a postemergence application in Texas.

9.3 Cotton with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, over-the-top, post-directed, hooded sprayer, preharvest

ATTENTION: Monsanto recommends this product for use only over-the-top of or directed onto improved cotton varieties that are designated as cotton with the **Roundup Ready® gene. SEVERE INJURY OR DEATH OF COTTON WILL RESULT IF ANY COTTON VARIETIES NOT PROPERLY DESIGNATED AS HAVING THE ROUNDUP READY® GENE ARE SPRAYED WITH THIS PRODUCT.**

ROUNDUP READY® COTTON VARIETIES MUST BE PURCHASED FROM AN AUTHORIZED LICENSED SEED SUPPLIER. THE DESIGNATION, "ROUNDUP READY", INDICATES THE COTTON VARIETY CONTAINS A PATENTED PROPRIETARY TRAIT.

USE INSTRUCTIONS:

	Maximum Allowable Yearly Rates	
1.	Combined total per year for all applications	5 quarts per acre
2.	Preplant, Preemergence applications	3.2 quarts per acre
3.	Total in-crop applications from cracking to layby	2.5 quarts per acre
4.	Maximum preharvest application rate	1.25 quarts per acre

For ground applications with broadcast equipment, apply this product in 5 to 20 gallons of spray solution per acre. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

For aerial applications, apply this product in 3 to 15 gallons of water per acre.

PRECAUTIONS, RESTRICTIONS: See section 9.0 for general precautionary instructions for use in Roundup Ready crops. The combined total application from crop emergence until harvest must not exceed 3.75 quarts per acre.

Over-the-top applications: This product may be applied by aerial or ground application equipment postemergence to Roundup Ready cotton from the ground cracking stage until the four leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). Over-the-top applications made after the four leaf (node) stage of development may result in boll loss, delayed maturity and/or yield loss. Any single over-the-top broadcast application should not exceed 20 fluid ounces per acre. No more than two over-the-top broadcast applications may be made from crop emergence through the four leaf (node) stage of development. Sequential over-the-top applications of this product must be at least 10 days apart and cotton must have at least two nodes of incremental growth between applications.

Post-directed or hooded applications. This product may be applied using precision post-directed or hooded sprayers to Roundup Ready cotton through layby. At this stage, post-directed equipment should be used which directs the spray to the base of the cotton plants. Contact of the spray with cotton leaves should be avoided to the maximum extent possible. To minimize spray onto the leaves of the cotton plants, place nozzles in a low position directing a horizontal spray pattern under the cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 30 PSI). For best results, make applications while weeds are small (less than 3 inches). Any single post-directed application should not exceed 20 fluid ounces per acre of this product. No more than two applications should be made from the fifth leaf through layby. Sequential in-crop applications of this product must be at least 10 days apart and cotton must have at least two nodes of incremental growth between applications.

ATTENTION: USE OF ROUNDUP D-PAK IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL-GROWTH OF ROUNDUP READY COTTON, HOWEVER, VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS MAKE IT IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.

Salvage Treatment. This treatment may be used after the four leaf stage of development and should only be used where weeds threaten to cause the loss of the crop. 20 fluid ounces per acre may be applied either as an over-the-top applications or as a post-directed treatments sprayed higher on the cotton plants and over the weeds. **NOTE: SALVAGE TREATMENTS WILL RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS. NO MORE THAN ONE SALVAGE TREATMENT SHOULD BE USED PER GROWING SEASON.**

Weeds controlled. For specific rates of application and instructions for control of specific weed species, refer to the annual and perennial weed rate tables in this booklet. Roundup D-PAK applied at 20 fluid ounces per acre will burndown or suppress the growth of the following perennial weeds and reduce crop competition: yellow and purple nutsedge, rhizome johnsongrass, common bermudagrass, silverleaf nightshade, trumpet creeper, and redvine. Fall preharvest applications may be required for control of these perennial weeds.

Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control.

Preharvest applications. This product may be applied for preharvest annual and perennial weed control as a broadcast treatment to Roundup Ready cotton after 20% boll crack. Allow a minimum of 7 days between application and harvest. NOTE: Roundup D-PAK will not enhance the performance of harvest aids when applied to Roundup Ready cotton. DO NOT apply Roundup D-PAK preharvest to crops grown for seed.

9.4 Soybeans with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, postemergence, preharvest, post-harvest

USE INSTRUCTIONS:

When applied as directed, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready soybeans. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product.

Maximum Allowable Application Rates

1. Combined total per year for all applications	5	quarts per acre
2. Preplant, Preemergence applications	3.2	quarts per acre
3. Total in-crop applications from cracking throughout flowering	2	quarts per acre
4. Maximum preharvest application rate	20	fluid ounces per acre

PRECAUTIONS/RESTRICTIONS: See section 9.0 for general precautionary instructions for use in Roundup Ready crops. The combined total application from crop emergence through harvest must not exceed 2 quarts per acre. The maximum rate for any single in crop application is 40 fluid ounces per acre. The maximum combined total of this product which can be applied during flowering is 40 fluid ounces per acre. Allow a minimum of 14 days between final application and harvest or feeding of soybean grain, forage or hay.

ANNUAL WEED RATE TABLES

The following rate recommendations will provide control of labeled grasses and broadleaf weeds in conventional and no-till Roundup Ready soybean production systems. Refer to the "ANNUAL WEED RATE TABLE" in this label for rate recommendations for specific annual weeds.

Monsanto will not warrant crop safety or weed control when Roundup Ready soybeans are treated with herbicides not specified on this supplemental label. Because of the potential for; 1) crop injury, 2) poor weed control from antagonism, and/or 3) rotational crop restrictions, herbicides not specified on this supplemental label should not be used, whether applied preemergence or applied postemergence as a tank mixture with Roundup D-PAK herbicide.

This product may be used up to 40 fluid ounces per acre in any single in-crop application for control of annual weeds, where heavy weed densities exist.

MIDWEST/ MID-ATLANTIC RECOMMENDATIONS

Narrow row or drilled soybeans: A single in-crop application of this product will provide effective control of labeled weeds. For best results, an initial application of 20 fluid ounces per acre, on 4 - 8" weeds is recommended. Weeds will generally be 4 - 8" tall 3 to 5 weeks after planting. If the initial application is delayed and weeds are 8 - 18" tall, use 30 fluid ounces per acre for best results.

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product at 15 to 20 fluid ounces per acre may be necessary to control late flushes of weeds.

Wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 20 fluid ounces per acre, on 4 - 8" weeds is recommended. Weeds will generally be 4 - 8" tall 3 to 5 weeks after planting. If new flushes of weeds occur, they can be controlled by sequential applications of this product.

Initial and Sequential (if needed) Applications

Weed Height (inches)	Rate (fl oz/A)
1-3	15
4-8	20
8-18	30

Giant ragweed: Apply 20 fluid ounces per acre when the weed is 8 -12" tall to avoid the need for sequential application.
Black nightshade, Pennsylvania smartweed, ladysthumb smartweed, velvetleaf and waterhemp : Apply 20 fluid ounces per acre to weeds 3 - 6" tall and 30 fluid ounces per acre when weeds are up to 12 inches tall. For Morningglory species apply 20 fluid ounces per acre when weeds are up to 4 inches tall, and 30 fluid ounces per acre when weeds are up to 6 inches tall.
Some weeds, such as black nightshade, woolly cupgrass, shattercane, wild proso millet, burcumber, and giant ragweed, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 15 fluid ounces of this product per acre for sequential applications.

SOUTHEAST RECOMMENDATIONS

Narrow row, drilled, or wide-row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 20 fluid ounces per acre, on 3 - 6" weeds is recommended. Weeds will generally be 3 - 6" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
3-6	20
6-12	30

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product at 10 to 20 fluid ounces per acre may be necessary to control late flushes of weeds.

Sequential Application (if needed)

Weed Height (inches)	Rate (fl oz/A)
2-3	10
3-6	15
6-12	20

Florida pusley, hemp sesbania and spurred anoda: Apply 20 fluid ounces per acre to weeds 2 - 4"for the initial application. Apply 20 fluid ounces per acre when these weeds are 3 - 6" tall if a sequential application is necessary.
Morningglory, black nightshade, groundcherry, and Pennsylvania smartweed: Apply 15 fl ounces per acre on 1 - 3" weeds, 20 fluid ounces per acre on 3 - 6" weeds, or 30 fluid ounces per acre on 6 - 12" weeds for the initial application.

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 10 fluid ounces of this product per acre for sequential applications.

DELTA/MID-SOUTH RECOMMENDATIONS

Narrow row, drilled, or wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. A sequential application will be required to control new flushes of weeds. For best results, an initial application of 20 fluid ounces per acre, on 2 - 4" weeds is recommended. Weeds will generally be 2 - 4" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
2-4	20
5-12	30

Sequential Application

Weed Height (inches)	Rate (fl oz/A)
2-3	10
3-6	15
6-12	20

Hemp sesbania and spurred anoda: Apply a sequential treatment of 20 fl ounces per acre on 3 - 6"weeds if necessary

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 10 fluid ounces of this product per acre for sequential applications.

PERENNIAL WEEDS RATE RECOMMENDATIONS

A 20 to 40 fluid ounces per acre rate (single or multiple applications) of this product will control or suppress perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly.

For best results, allow perennial weed species to achieve at least 6" of growth before spraying with Roundup D-PAK herbicide.

9.5 Sugar beets with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, preemergence, postemergence

USE INSTRUCTIONS:

This product may be applied postemergent over the top of Roundup Ready sugar beets from emergence to 30 days prior to harvest. To maximize yield potential spray sugar beets early to eliminate competing weeds. Up to 4 sequential over-the-top applications of this product may be made, and they should be at least 10 days apart.

	Maximum Allowable Application Rates	
1. Combined total per year for all applications	5	quarts per acre
2. Preplant, Preemergence applications	3.2	quarts per acre
3. Emergence to 8 leaf stage	1.5	quarts per acre
4. Between 8 leaf stage and canopy closure	20	fluid ounces per acre

For ground applications with broadcast equipment, apply this product in 5 to 40 gallons of spray solution per acre. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment use flat fan nozzles. Check for even distribution of spray droplets.

For aerial application: Use the recommended rates of this product in 3 to 15 gallons of spray solution per acre.

PRECAUTIONS, RESTRICTIONS: See section 9.0 for general precautionary instructions for use in Roundup Ready crops. The combined total application from crop emergence through harvest must not exceed 2.8 quarts per acre. The maximum rate for any single application between emergence to the 8 leaf stage is 1 quarts per acre. The maximum rate for any single application between the 8 leaf stage and canopy closure is 20 fluid ounces per acre. Allow a minimum of 30 days between last application and sugar beet harvest. For any crop NOT listed in the "CROPS" section of this label booklet, applications must be at least 30 days prior to planting.

Weeds controlled. For rates of application and instructions for control of specific weed species, refer to the annual and perennial weed tables in this label booklet.

Ammonium sulfate may be mixed with this product for applications to Roundup Ready sugar beets. Refer to the "Mixing" section for use instructions for ammonium sulfate.

Some weeds with multiple germination times or suppressed (stunted) weeds may require a second application of this product for complete control. The second application should be made after some regrowth has occurred and at least 10 days after a previous application of this product.

This product will control or suppress, most perennial weeds. For some perennial weeds, repeat applications may be required to eliminate crop competition throughout the growing season.

10.0 Farmsteads

TYPES OF APPLICATIONS: General nonselective weed control, trim-and-edge, greenhouse / shadehouse, chemical mowing, cut stumps, habitat management.

10.1 General nonselective weed control, Trim-and-edge, Greenhouse/Shadehouse

USE INSTRUCTIONS: This product may be used to control annual weeds, perennial weeds and woody brush which are found in any part of the farmstead, including building foundations, along and in fences, in dry ditches and canals, along ditchbanks, farm roads, shelterbelts, prior to landscape plantings and equipment storage areas.

This product may be tank mixed with the following products. Refer to these product labels for approved farmstead sites and application rates. For annual weeds, use 20 fluid ounces per acre of this product when weeds are less than 6 inches tall and 30 fluid ounces per acre when weeds are greater than 6 inches tall. For perennial weeds, apply 40 fluid ounces to 3.2 quarts per acre in these tank mixes. For tank mixtures with these products through backpack sprayers, handguns or other high-volume spray-to-wet applications, see the "HAND-HELD AND HIGH VOLUME EQUIPMENT" section of this label for recommended rates.

Arsenal	Plateau
Banvel	Princep DF
Barricade 65WG	Princep Liquid
Diuron	Ronstar 50 WP
Endurance	Sahara
Escort	Simazine
Karmex DF	Surflan
Krovar I DF	Telar
Oust	Vanquish
Pendulum 3.3 EC	2,4-D
Pendulum WDG	

Banvel tank mixtures may not be applied by air in California.

Greenhouse/Shadehouse

This product may be used to control weeds in and around greenhouses and shadehouses. Desirable vegetation must not be present during application and air circulation fans must be turned off.

10.2 Chemical mowing

USE INSTRUCTIONS: This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Apply this product at a rate of 3.75 to 5 fluid ounces per acre. Use 5 fluid ounces of this product per acre when treating tall fescue, fine fescue, orchardgrass or quackgrass covers. Use 3.75 fluid ounces of this product per acre when treating Kentucky bluegrass. Apply treatments in 10 to 20 gallons of spray solution per acre. Chemical mowing applications may be made along farm ditches and other parts of farmsteads.

PRECAUTIONS, RESTRICTIONS: Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

10.3 Cut Stumps

TYPES OF APPLICATION: Treating cut stumps in any noncrop site listed on this label

USE INSTRUCTIONS: This product will control regrowth of cut stumps and resprouts of many types of woody brush and tree species, some of which are listed below. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 to 100 percent solution of this product to the freshly-cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion

Alder	Salt-cedar
Eucalyptus	Sweetgum
Madrone	Tan oak
Oak	Willow
Reed, giant	

PRECAUTIONS, RESTRICTIONS: DO NOT make cut stump applications when the roots of desirable woody brush or trees may be grafted to the roots of the cut stump. injury resulting from root grafting may occur in adjacent woody brush or trees.

10.4 Habitat Management

TYPES OF USES: Habitat restoration and maintenance, wildlife food plots

Habitat restoration and maintenance

USE INSTRUCTIONS: This product may be used to control exotic and other undesirable vegetation in habitat management areas. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broadspectrum vegetation control requirements in habitat management areas. Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement. The tank mixtures listed in this section of the label may be used for habitat restoration and maintenance.

Wildlife food plots

USE INSTRUCTIONS: This product may be used as a site preparation treatment to control annual and perennial weeds prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after application before tillage.

11.0 ANNUAL WEEDS RATE TABLE ALPHABETICALLY BY SPECIES

Water carrier volumes of 3 to 10 gallons per acre for ground applications and 3 to 5 gallons per acre for aerial applications are recommended.

Apply to actively growing annual weeds.

Do not tank mix with soil residual herbicides when using these rates unless otherwise specified.

For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment.

For those rates less than 30 fluid ounces per acre, this product may be used up to 30 fluid ounces per acre where heavy weed densities exist.

ANNUAL WEEDS RATE TABLE

WEED SPECIES	RATE (FLUID OUNCES PER ACRE) 10	15	20	25	30
	MAXIMUM HEIGHT/LENGTH				
Annoda, spurred	-	2"	3"	5"	8"
Barley	18"	18"+	-	-	-
Barnyardgrass	-	3"	6"	7"	9"
Bassia, fivehook	-	-	6"	-	-
Bittercress	12"	20"	-	-	-
Bluegrass, annual	10"	-	-	-	-
Bluegrass, bulbous	6"	-	-	-	-
Brome, downy [1,2]	6"	12"-	-	-	-
Brome, Japanese	6"	12"	24"	-	-
Browntop panicum	6"	8"	12"	-	24"
Buckwheat, wild [3]	-	1"	2"	-	-
Burcucumber	6"	12"	18"	-	-
Buttercup	12"	20"	-	-	-
Carolina foxtail	10"	-	-	-	-
Carolina geranium	-	-	4"	-	9"
Carpetweed	-	6"	12"	-	-
Cheat [2]	6"	20"	-	-	-
Chervil	20"	-	-	-	-
Chickweed	-	12"	18"	-	-
Cocklebur	12"	18"	24"	-	36"
Copperleaf, hophornbeam	-	2"	4"	-	6"

Copperleaf, Virginia	-	2"	4"	-	6"
Corn	6"	12"	20"	-	-
Corn speedwell	12"	-	-	-	-
Crabgrass	6"	12"	18"	-	-
Cutleaf evening primrose	-	-	3"	-	6"
Devilsclaw (unicorn plant)	-	3"	6"	-	-
Dwarf dandelion	12"	-	-	-	-
Eastern mannagrass	8"	12"	-	-	-
Eclipta		-	4"	8"	12"
Fall panicum	4"	6"	8"	12"	24"
Falsedandelion	-	20"	-	-	-
Falseflax, smallseed	12"	-	-	-	-
Fiddleneck	-	6"	12"	-	-
Field pennycress	6"	12"	-	-	-
Filaree	-	-	6"	-	12"
Fleabane, annual	6"	20"	-	-	-
Fleabane, hairy (*Conyza bonariensis)*	-	-	6"	-	10"
Fleabane, rough	3"	6"	12"	-	-
Florida pusley	-	-	4"	-	6"
Foxtail	6"	12"	20"	-	-
Goatgrass, *jointed*	6"	12"	-	-	-
Goosegrass	3"	5"	8"	-	18"
Grain sorghum (milo)	6"	12"	20"	-	-
Groundsel, common	-	6"	10"	-	-
Hemp sesbania	-	2"	4"	6"	8"
Henbit	-	-	6"	-	12"
Horseweed/	6"	12"	18"	-	-

Marestail (*Conyza canadensis*)					
Itchgrass	6"	12"	18"	-	-
Jimsonweed	-	-	12"	-	18"
Johnsongrass, seedling	-	12"	18"	-	24"
Junglerice	-	3"	6"	7"	9"
Knotweed	3"	8"	12"	-	20"
Kochia[4]	-	3 to 6"	12"	-	-
Lambsquarters	6"	8"	12"	-	20"
Little barley	12"	-	-	-	-
London rocket	6"	-	24"	-	-
Mayweed	-	2"	6"	12"	18"
Morningglory, annual (*Ipomoea spp.*)	-	2"	3"	4"	6"
Mustard, blue	6"	12"	18"	-	-
Mustard, tansy	6"	12"	18"	-	-
Mustard, tumble	6"	12"	18"	-	-
Mustard, wild	6"	12"	18"	-	-
Nightshade, black	-	4"	8"	-	-
Nightshade, hairy	-	4"	8"	-	-
Oats	-	6"	20"	-	-
Pigweed species	-	12"	18"	24"	-
Prickly lettuce	-	6"	12"	-	-
Purslane	-	6"	8"	-	12"
Ragweed, common	-	6"	12"	-	18"
Ragweed, giant	-	4"	9"	-	18"
Red rice	-	-	4"	-	-
Russian thistle	-	6"	12"	-	-

Rye, cereal [2]	6"	18"	18"+	-	-	
Ryegrass	-	-	6"	-	12"	
Sandbur, field		6"	12"	-	-	-
Shattercane	12"	18"	-	-	-	
Shepherd's-purse	6"	12"	-	-	-	
Sicklepod	-	2"	4"	-	8"	
Signalgrass, broadleaf	-	3"	6"	7"	9"	
Smartweed, ladysthumb	-	-	6"	-	9"	
Smartweed, Pennsylvania	-	-	6"	-	9"	
Sowthistle, annual	-	-	6"	-	12"	
Spanishneedles	-	-	8"	-	18"	
Speedwell, purslane	12"	-	-	-	-	
Sprangletop	6"	12"	20"	-	-	
Spurge, prostrate	-	6"	12"	-	-	
Spurge, spotted	-	6"	12"	-	-	
Spurry, umbrella	6"	-	-	-	-	
Stinkgrass	-	12"	-	-	-	
Sunflower	12"	18"	-	-	-	
Teaweed/ Prickly sida	-	2"	4"	-	6"	
Texas panicum	6"	8"	12"	-	24"	
Velvetleaf	-	3"	6"	-	12"	
Virginia pepperweed	-	18	-	-	-	
Waterhemp	-	3"	6"	-	12"	
Wheat [2]	6"	12"	18"	-	-	
Wheat, (overwintered)		-	6"	12"	18+"	-
Wild oats	6"	20"	-	-	-	

Wild Proso Millet	-	6"	12"	-	18"
Witchgrass	-	12"	-	-	-
Woolly cupgrass	-	6"	12"	-	-
Yellow rocket	-	12"	20"	-	-

[1] For control of Downy Brome in no-till systems, use 15 fluid ounces per acre.

[2] Performance is better if application is made before this weed reaches the boot stage of growth.

[3] Use 15 fluid ounces per acre of this product to control wild buckwheat in the cotyledon to 2-leaf stage. Use 20 fluid ounces per acre to control 2 to 4-leaf wild buckwheat. For improved control of wild buckwheat over 2 inches in size, use sequential treatments of 20 fluid ounces followed by 20 fluid ounces of this product per acre.

[4] Do not treat kochia in the button stage.

11.1 Annual Weeds--Water Carrier Volumes of 10 to 40 Gallons per Acre

Apply 20 to 30 fluid ounces of this product per acre. Use 20 fluid ounces per acre if weeds are less than 6 inches tall and 30 fluid ounces per acre if weeds are over 6 inches tall.
These rates will provide control of weeds listed in the annual weed control tables when water carrier volumes are 10 to 40 gallons per acre for ground applications.

11.2 Annual Weeds -- Tank Mixtures with 2,4-D or Banvel

8 to 10 fluid ounces of this product plus 0.25 pound a.i. of Banvel or 0.5 pound a.i. of 2,4-D per acre will control the following weeds with the maximum height or length indicated: 6" -- prickly lettuce, marestail/horseweed (*Conyza canadensis)*, morningglory (*Ipomoea spp.*), kochia (Banvel only); 12" -- cocklebur, lambsquarters, pigweed, Russian thistle.

10 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D per acre will control the following weeds when they are a maximum height or length of 6 inches: common ragweed, giant ragweed, Pennsylvania smartweed, and velvetleaf.

8 fluid ounces of this product plus 0.25 pound a.i. of Banvel or 0.5 pound a.i. of 2,4-D per acre will control foxtail up to 18".

Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures. Some crop injury may occur if Banvel is applied within 45 days of planting.

DO NOT apply Banvel tank mixtures by air in California.

12.0 PERENNIAL WEEDS RATE TABLE ALPHABETICALLY BY SPECIES

Apply to actively growing perennial weeds.

NOTE: If weeds have been mowed or tilled, do not treat until plants have resumed active growth and have reached the recommended stages.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

Unless otherwise stated, allow 7 or more days after application before tillage.

Best results are obtained when soil moisture is adequate for active weed growth.

Weed Species	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution	Comments
Alfalfa	2/3-1 1/4	3-10	1 1/4%	Make applications after the last hay cutting in the fall. Allow alfalfa to regrow to a height of 6 to 8 inches or more prior to treatment. Applications should be followed with deep tillage at least 7 days after treatment, but before soil freeze-up.
Alligatorweed	2.5	3-20	1%	Partial control. Apply when most of the plants are in bloom. Repeat applications will be required to maintain control.
Anise (fennel)	--	--	1-1 1/4%	Apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.
Bahiagrass	2-3.2	3-20	1 1/4%	Apply when most plants have reached the early head stage.
Bentgrass	1	10-20	1 1/4%	For suppression in grass seed production areas. For ground applications only. Ensure entire crown area has resumed growth prior to a fall application. Bentgrass should have at least 3 inches of growth. Tillage prior to treatment should be avoided. Tillage 7 to 10 days after application is recommended for best results.
Bermudagrass	2-3.2	3-20	1 1/4%	For control, apply 3.2 quarts of this product per acre. For partial control, apply 2 quarts per acre. Treat when bermudagrass is actively growing and seedheads are present. Retreatment may be necessary to maintain control.
Bermudagrass, water (knotgrass)	2/3-1	5-10	1 1/4%	Apply 1 quarts of this product in 5 to 10 gallons of water per acre. Apply when water bermudagrass is 12 to 18 inches in length.

				Allow 7 or more days before tilling, flushing or flooding the field. Fall applications only: Apply 20 fluid ounces of this product in 5 to 10 gallons of water per acre. Fallow fields should be tilled prior to application. Apply prior to frost on water bermudagrass that is 12 to 18 inches in length. This product is not registered in California for use on water bermudagrass.
Bindweed, field	0.5-3.2	3-20	1 1/4%	Do not treat when weeds are under drought stress as good soil moisture is necessary for active growth. For control, apply 2.5 to 3.2 quarts of this product per acre west of the Mississippi River and 2 to 2.5 quarts east of the Mississippi River. Apply when the weeds are at or beyond full bloom. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost. Also for control, apply 1 1/4 quarts of this product plus 0.5 pound a.i. of Banvel in 10 to 20 gallons of water per acre. Do not apply by air. For suppression on irrigated agricultural land, apply 2/3 to 1 1/4 quarts of this product plus 1 pound a.i. of 2,4-D in 10 to 20 gallons of water per acre with ground equipment only. Applications should be made following harvest or in fall fallow ground when the bindweed is actively growing and the majority of runners are 12 inches or more in length. The use of at least one irrigation will promote active bindweed growth. For suppression, apply 10 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Apply by air in fallow and reduced tillage systems only. Applications should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length. **In California only**, apply 2/3 to 3.2 quarts of this product per acre. Actual rate needed for suppression or control will vary within this

				range depending on local conditions. For suppression on irrigated land where annual tillage is performed, apply 20 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to bindweed that has reached a length of 12 inches or greater. Allow maximum weed emergence and runner growth. Allow 3 or more days after application before tillage.
Bluegrass, Kentucky	2/3-1 1/4	3-40	1 1/4%	Apply 1 1/4 quarts of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 2/3 to 1 quarts of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.
Blueweed, Texas	2-3.2	3-40	1 1/4%	Apply 2.5 to 3.2 quarts of this product per acre west of the Mississippi River and 2 to 2.5 quarts per acre east of the Mississippi River. Apply when plants are at or beyond full bloom. New leaf development indicates active growth. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost.
Brackenfern	2-2.5	3-40	2/3-1%	Apply to fully expanded fronds which are at least 18 inches long.
Bromegrass, smooth	2/3-1 1/4	3-40	1 1/4%	Apply 1 1/4 quarts of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 2/3 to 1 quarts of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.
Bursage, woolly-leaf	--	3-20	1 1/4%	For control, apply 1 1/4 quarts of this product plus 1 pint of Banvel per acre. For partial control, apply 20 fluid ounces of this product plus 1 pint of Banvel per acre. Apply when plants are producing new active growth which has been initiated by moisture for at least 2 weeks and when plants are at or beyond flowering.
Canarygrass,				

reed	1 1/4-2	3-40	1 1/4%	For best results, apply when most plants have reached the boot-to-head stage of growth.
Cattail	2-3.2	3-40	1 1/4%	Apply when most plants have reached the early head stage.
Clover; red, white	2-3.2	3-20	1 1/4%	Apply when most plants have reached the early bud stage.
Cogongrass	2-3.2	10-40	1 1/4%	Apply when cogongrass is at least 18 inches tall in late summer or fall. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.
Dallisgrass	2-3.2	3-20	1 1/4%	Apply when most plants have reached the early head stage.
Dandelion	2-3.2	3-40	1 1/4%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 10 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre.
Dock, curly	2-3.2	3-40	1 1/4%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 10 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre.
Dogbane, hemp	2.5	3-40	1 1/4%	Apply when most plants have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For best results, apply in late summer or fall. For suppression, apply 10 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Delay applications until maximum emergence of dogbane has occurred.
Fescue (except tall)	2-3.2	3-20	1 1/4%	Apply when most plants have reached the early head stage.
Fescue, tall	2/3-2	3-40	1 1/4%	Apply 2 quarts of this product per acre when most plants have reached boot-to-early seedhead stage of development.

				Fall applications only: Apply 20 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to fescue in the fall when plants have 6 to 12 inches of new growth. A sequential application of 10 fluid ounces per acre of this product will improve long-term control and control seedlings germinating after fall treatments or the following spring.
	Guineagrass	2	3-40	2/3%	Apply when most plants have reached at least the 7-leaf stage of growth. Ensure thorough coverage when using hand-held equipment.
	Horsenettle	2-3.2	3-20	1 1/4%	Apply when most plants have reached the early bud stage.
	Horseradish	2.5	3-40	1 1/4%	Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.
	Iceplant	--	--	1-1 1/4%	Iceplant should be at or beyond the early bud stage of growth. Thorough coverage is necessary for best control.
	Jerusalem artichoke	2-3.2	3-20	1 1/4%	Apply when most plants are in the early bud stage.
	Johnsongrass	0.5-2	3-40	2/3%	In annual cropping systems apply 2/3 to 1 1/4 quarts of this product per acre. Apply 20 fluid ounces of this product in 3 to 10 gallons of water per acre. Use 1 1/4 quarts of this product when applying 10 to 40 gallons of water per acre. In noncrop, or areas where annual tillage (no-till) is not practiced, apply 1 1/4 to 2 quarts of this product in 10 to 40 gallons of water per acre. For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Allow 7 or more days after application before tillage. Do not tank mix with residual herbicides when using the 20 fluid ounces per acre rate. For burndown of Johnsongrass, apply 10 fluid ounces of this product in 3 to 10 gallons of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage. Spot treatment (partial control or suppression)--Apply a 2/3 percent solution of this product when Johnsongrass is 12 to 18 inches in

				height. Coverage should be uniform and complete.
Kikuyugrass	1 1/4-2	3-40	1 1/4%	Spray when most kikuyugrass is at least 8 inches in height (3 or 4-leaf stage of growth). Allow 3 or more days after application before tillage.
Knapweed	2.5	3-40	1 1/4%	Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.
Lantana	--	--	2/3-1%	Apply at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.
Lespedeza	2-3.2	3-20	1 1/4%	Apply when most plants have reached the early bud stage.
Milkweed, common	2	3-40	1 1/4%	Apply when most plants have reached the late bud to flower stage of growth.
Muhly, wirestem	2/3-1 1/4	3-40	1 1/4%	Use 20 fluid ounces of this product in 3 to 10 gallons of water per acre. Use 1 1/4 quarts of this product when applying 10 to 40 gallons of water per acre or in pasture, sod, or noncrop areas. Spray when the wirestem muhly is 8 inches or more in height. Do not till between harvest and fall applications or in the fall or spring prior to spring applications. Allow 3 or more days after application before tillage.
Mullein, common	2-3.2	3-20	1 1/4%	Apply when most plants are in the early bud stage.
Napiergrass	2-3.2	3-20	1 1/4%	Apply when most plants are in the early head stage.
Nightshade, silverleaf	1 1/4	3-10	1 1/4%	Applications should be made when at least 60 percent of the plants have berries. Fall treatments must be applied before a killing frost.
Nutsedge; purple, yellow	0.5-2	3-40	2/3-1 1/4%	Apply 2 quarts of this product per acre or apply a 2/3 to 1 1/4 percent solution for control of nutsedge plants and immature nutlets attached to treated plants. Treat when plants are in flower or when new nutlets can be found at rhizome tips. Nutlets which have not germinated will not be controlled and may germinate following treatment. Repeat

				treatments will be required for long-term control of ungerminated tubers. Sequential applications: 2/3 to 1 1/4 quarts of this product in 3 to 10 gallons of water per acre will also provide control. Make applications when a majority of the plants are in the 3 to 5-leaf stage (less than 6 inches tall). Repeat this application, as necessary, when newly emerging plants reach the 3 to 5-leaf stage. Subsequent applications will be necessary for long-term control. For partial control of existing plants, apply 10 to 40 fluid ounces of this product in 3 to 40 gallons of water per acre. Treat when plants have 3 to 5 leaves and most are less than 6 inches tall. Repeat treatments will be required to control subsequent emerging plants or regrowth of existing plants.
Orchardgrass	2/3-1 1/4	3-40	1 1/4%	Apply 1 1/4 quarts of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 2/3 to 1 quarts of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height. Orchardgrass sods going to no-till corn: Apply 2/3 to 1 quarts of this product in 3 to 10 gallons of water per acre. Apply to orchardgrass that is a minimum of 12 inches tall for spring applications and 6 inches tall for fall applications. Allow at least 3 days following application before planting. A sequential application of atrazine will be necessary for optimum results.
Pampasgrass	--	--	1-1 1/4%	Pampasgrass should be at or beyond the boot stage of growth. Thorough coverage is necessary for best control.
Paragrass	2-3.2	3-20	1 1/4%	Apply when most plants are in the early head stage.
Phragmites	2-3.2	10-40	2/3-1 1/4%	For partial control. For best results, treat during late summer or fall months or when plants are actively growing and in full bloom. Treatment before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat

				treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.
Poison hemlock	--	--	2/3-1 1/4%	Apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.
Pokeweed, common	2/3	3-40	1 1/4%	Apply to actively growing plants up to 24 inches tall.
Quackgrass	2/3-2	3-40	1 1/4%	In annual cropping systems, or in pastures and sods followed by deep tillage: Apply 20 fluid ounces of this product in 3 to 10 gallons of water per acre. For 10 to 40 gallons of water per acre, apply 1 1/4 quarts of this product. Do not tank mix with residual herbicides when using the 20 fluid ounce rate. Spray when quackgrass is 6 to 8 inches in height. Do not till between harvest and fall applications or in fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, use a moldboard plow for best results. In pastures, sods or noncrop areas where deep tillage does not follow application: Apply 1 1/4 to 2 quarts of this product in 10 to 40 gallons of water per acre when the quackgrass is greater than 8 inches tall.
Redvine	0.75-1 1/4	5-10	1 1/4%	For suppression, apply 15 fluid ounces of this product per acre at each of two applications 7 to 14 days apart or a single application of 1 1/4 quarts per acre. Apply recommended rates in 5 to 10 gallons of water per acre. Apply in late September or early October to plants which are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.
Reed, giant	--	--	1 1/4%	Best results are obtained when applications are made in late summer to fall.
Ryegrass, perennial	2/3-2	3-40	2/3%	In annual cropping systems apply 2/3 to 1 1/4 quarts of this product per acre. Apply 2/3 quart of this product in 3 to 10 gallons of water per acre. Use 1 1/4 quarts of this product when applying 10 to 40 gallons of water per acre. In noncrop, or areas where annual tillage (no-till)

				is not practiced, apply 1 1/4 to 2 quarts of this product in 10 to 40 gallons of water per acre. For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Do not tank-mix with residual herbicides when using the 2/3 quart per acre rate.
	Smartweed, swamp	2-3.2	3-40	1 1/4%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 10 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall.
	Sowthistle, perennial	1 1/2-2	3-40	1 1/4%	Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.
	Spurge, leafy	--	3-10	1 1/4%	For suppression, apply 10 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall.
	Starthistle, yellow	1 1/4	10-40	1 1/4%	Best results are obtained when applications are made during the rosette, bolting and early flower stages.
	Sweet potato, wild	--	--	1 1/4%	Partial control. Apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.
	Thistle, artichoke	--	--	1 1/4%	Partial control. Apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.
	Thistle, Canada	1 1/4-2	3-40	1 1/4%	Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied

				before a killing frost. Allow 3 or more days after application before tillage. For suppression, apply 2/3 quart of this product, or 10 fluid ounces of this product plus 0.5 pound a.i. 2,4-D, in 3 to 10 gallons of water per acre in the late summer or fall after harvest, mowing or tillage. Allow rosette regrowth to a minimum of 6 inches in diameter before treating. Applications can be made as long as leaves are still green and plants are actively growing at the time of application. Allow 3 or more days after application before tillage.
Timothy	1 1/4-2	3-40	1 1/4%	For best results, apply when most plants have reached the boot-to-head stage of growth.
Torpedograss	2.5-3.2	3-40	1 1/4%	For partial control. Apply when most plants are at or beyond the seedhead stage of growth. Repeat applications will be required to maintain control. Fall treatments must be applied before frost.
Trumpetcreeper	1 1/4	5-10	1 1/4%	Partial control. Apply in late September or October, to plants which are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.
Vaseygrass	2-3.2	3-20	1 1/4%	Apply when most plants are in the early head stage.
Velvetgrass	2-3.2	3-20	1 1/4%	Apply when most plants are in the early head stage.
Wheatgrass, western	1 1/4-2	3-40	1 1/4%	For best results, apply when most plants have reached the boot-to-head stage of growth.

13.0 WOODY BRUSH AND TREES RATE TABLE ALPHABETICALLY BY SPECIES

Apply this product after full leaf expansion, unless otherwise directed. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth. Best results are obtained when application is made in late summer or fall after fruit formation.

In arid areas, best results are obtained when applications are made in the spring to early summer when brush species are at high moisture content and are flowering.

Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with fall treatments.

Allow 7 or more days after application before tillage, mowing or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if fall treatments are made following a frost.

Weed Species	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution	Comments
Alder	2-2.5	3-40	2/3-1%	For control
Ash	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Aspen, quaking	1 1/4-2	3-40	2/3-1%	For control
Bearmat (Bearclover)	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Beech	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Birch	1 1/3	3-40	2/3%	For control
Blackberry	2-2.5	10-40	2/3-1%	For control. Make applications after plants have reached full leaf maturity. Best results are obtained when applications are made in late summer or fall. Applications may also be made after leaf drop and until a killing frost or as long as stems are green. After berries have set or dropped in late fall, blackberry can be controlled by applying a 1/2 percent solution of this product. For control of blackberries after leaf drop and until killing frost or as long as stems are green, apply 2 to 2.5 quarts of this product in 10 to 40 gallons of water per acre.
Blackgum	1 1/4-3.2	3-40	2/3-1 1/4%	For control
Bracken	1 1/4-3.2	3-40	2/3-1 1/4%	For control
Broom; French, Scotch	--	--	1-1 1/4%	For control
Buckwheat, California	--	--	2/3-1 1/4%	For partial control. Thorough coverage of foliage is necessary for best results.
Cascara	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Catsclaw	--	--	2/3-1%	Partial control
Ceanothus	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control

Chamise	--	--	2/3%	For control. Thorough coverage of foliage is necessary for best results.
Cherry; bitter, black, pin	1 1/4-2	3-40	2/3-1%	For control
Coyote brush	--	--	1-1 1/4%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Dogwood	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Elderberry	1 1/4	3-40	2/3%	For control
Elm	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Eucalyptus	--	--	1 1/4%	For control of eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed plants.
Florida holly (Brazilian Peppertree)	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Gorse	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Hasardia	--	--	2/3-1 1/4%	Partial control. Thorough coverage of foliage is necessary for best results.
Hawthorn	1 1/4-2	3-40	2/3-1%	For control
Hazel	1 1/4	3-40	2/3%	For control
Hickory	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Honeysuckle	2-2.5	3-40	2/3-1%	For control
Hornbeam, American	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Kudzu	2.5	3-40	1 1/4%	For control. Repeat applications may be required to maintain control.
Locust, black	1 1/4-2.5	3-40	2/3-1 1/4%	Partial control
Madrone resprouts	--	--	1 1/4%	Partial control. Apply to resprouts that are 3 to 6 feet tall. Best results are obtained with spring/early summer treatments.
Manzanita	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Maple, red	1 1/4-2.5	3-40	2/3-1%	For control, apply a 2/3 to 1 percent solution when at least 50 percent of the new leaves are

				fully developed. For partial control, apply 1 1/3 to 2.5 quarts of this product per acre.
Maple, sugar	--	--	2/3-1%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Monkey flower	--	--	2/3-1 14%	Partial control. Thorough coverage of foliage is necessary for best results.
Oak; black, white	1 1/4-2.5	3-40	2/3-1 1/4%	Partial control
Oak, post	2-2.5	3-40	2/3-1%	For control
Oak; northern, pin	--	--	2/3-1%	For control. Apply when at least 50 percent of the new leaves are fully developed
Oak; southern red	1 1/4-2	3-40	2/3-1%	For control
Persimmon	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Pine	1 1/4-3.2	3-40	2/3-1 1/4%	For control
Poison ivy/ Poison oak	2.5-3.2	3-40	1 1/4%	For control. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.
Poplar, yellow	1 1/4-3.2	3-40	2/3-1 ¼%	Partial control
Redbud, eastern	1 1/4-3.2	3-40	2/3-1 1/4%	For control
Rose, multiflora	1 1/4	3-40	2/3%	For control. Treatments should be made prior to leaf deterioration by leaf-eating insects.
Russian olive	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Sage, black	--	--	2/3%	For control. Thorough coverage of foliage is necessary for best results.
Sage, white	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Sage brush, California	--	--	2/3%	For control. Thorough coverage of foliage is necessary for best results.
Salmonberry	1 1/4	3-40	2/3%	For control
Salt-cedar	1 1/4-3.2	3-40	2/3-1 1/4%	For control
Sassafras	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control

Sourwood	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Sumac; poison, smooth, winged	1 1/4-2.5	3-40	2/3-1 1/4%	Partial control
Sweetgum	1 1/4-2	3-40	2/3-1%	For control
Swordfern	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Tallowtree, Chinese	--	--	2/3%	For control. Thorough coverage of foliage is necessary for best results.
Tan oak resprouts	--	--	1 1/4%	For partial control. Apply to resprouts that are less than 3 to 6 feet tall. Best results are obtained with fall applications.
Thimbleberry	1 1/4	3-40	2/3%	For control
Tobacco, tree	--	--	2/3-1 1/4%	Partial control
Trumpetcreeper	1 1/4-2	3-40	2/3-1%	For control
Vine maple	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Virginia creeper	1 1/4-3.2	3-40	2/3-1 1/4%	For control
Waxmyrtle, southern	1 1/4-3.2	3-40	2/3-1 1/4%	Partial control
Willow	2	3-40	2/3%	For control

14.0 LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the

Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

For over-the-top uses on Roundup Ready crop varieties, crop safety and weed control performance are not warranted by Monsanto when this product is used in conjunction with "brown bag" or "bin run" seed saved from previous year's production and replanted.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

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This product is protected by
U.S. Patent No. 4,405,531.
Other patents pending.
No license granted under any
non-U.S. patent(s).

EPA Reg. No. 524-494

In case of an emergency involving this product,
Call Collect, day or night, (314) 694-4000.

MONSANTO COMPANY
ST. LOUIS, MISSOURI, 63167 USA

SUPPLEMENTAL LABELING

READ THE ENTIRE LABEL FOR ROUNDUP D-PAK™ HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Label" as used in this supplemental labeling refers to the label booklet for Roundup D-PAK, container labels and this supplement.

Roundup D-PAK™ Herbicide

EPA Reg. No. 524-494

FOR POSTEMERGENCE APPLICATIONS TO SOYBEANS WITH THE ROUNDUP READY® GENE

Keep out of reach of children.
CAUTION!

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This label must be in the possession of the user at the time of application.
See "GENERAL INFORMATION" and "APPLICATION INSTRUCTIONS" sections of the label booklet for Roundup D-PAK herbicide for essential product performance information.

General Information

MONSANTO COMPANY RECOMMENDS USE OF THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON SOYBEAN VARIETIES DESIGNATED AS CONTAINING THE ROUNDUP READY® GENE.

- Applying this product to soybean varieties which are not designated as Roundup Ready® will result in severe crop injury and yield loss. Avoid contact with foliage, green stems, or fruit of crops, or any desirable plants which do not contain the Roundup Ready gene, since severe injury or destruction will result.

- The Roundup Ready designation indicates that the soybean contains a patented gene which provides tolerance to this herbicide. Information on Roundup Ready soybeans may be obtained from your seed supplier or Monsanto representative.

Application Instructions

This product may be applied postemergence to Roundup Ready soybeans from the cracking stage throughout flowering. Allow a minimum of 14 days between final application and harvest or feeding of soybean grain, forage or hay.

Maximum Allowable Application Rates:

• Combined total per year for all applications	5	quarts per acre
• Preplant, Preemergence applications	3.2	quarts per acre
• Total in-crop applications from cracking throughout flowering	2	quarts per acre
• Maximum preharvest application rate	20	fluid ounces per acre

When applied as directed, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready soybeans. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product.

PRECAUTIONS/RESTRICTIONS: The combined total application from crop emergence through harvest must not exceed 2 quarts per acre. The maximum rate for any single in crop application is 40 fluid ounces per acre. The maximum combined total of this product which can be applied during flowering is 40 fluid ounces per acre. Allow a minimum of 14 days between final application and harvest of soybean grain, forage or hay.

There are no rotational crop restrictions following applications of this product.

For ground applications: Use the recommended rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles which provide a flat fan pattern. Check for even distribution of spray droplets.

For aerial applications: Use the recommended rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed 20 fluid ounces of this product per acre unless otherwise directed. DO NOT APPLY DURING LOW LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. MAINTAIN APPROPRIATE BUFFER ZONES TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION.

ANNUAL WEED RATE TABLES

The following rate recommendations will provide control of labeled grasses and broadleaf weeds in *conventional and no-till soybean production systems. Refer to the label booklet for rate recommendations* for specific annual weeds.

Monsanto will not warrant crop safety or weed control when Roundup Ready soybeans are treated with herbicides not specified on this supplemental label. Because of the potential for; 1) crop injury, 2) poor weed control from antagonism, and/or 3) rotational crop restrictions, herbicides not specified on this supplemental label should not be used, whether applied preemergence or applied postemergence as a tank mixture with Roundup D-PAK.

This product may be used up to 40 fluid ounces per acre in any single application for control of annual weeds, where heavy weed densities exist.

NOTE: The following recommendations are based on a clean start at planting by using a burn down application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a preplant burn-down treatment of 10-40 fluid ounces per acre of this product can be used to control existing weeds prior to crop emergence.

MIDWEST/ MID-ATLANTIC RECOMMENDATIONS

Narrow row or drilled soybeans: A single in-crop application of this product will provide effective control of labeled weeds. For best results, an initial application of 20 fluid ounces per acre on 4-8" weeds is recommended. Weeds will generally be 4-8" tall 3 to 5 weeks after planting. If the initial application is delayed and weeds are 8-18" tall, use 30 fluid ounces per acre for best results.

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product at 15 to 20 fluid ounces per acre may be necessary to control late flushes of weeds.

Wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 20 fluid ounces per acre on 4-8" weeds is recommended. Weeds will generally be 4-8" tall 3 to 5 weeks after planting. If new flushes of weeds occur, they can be controlled by sequential applications of this product.

Initial and Sequential (if needed) Applications

Weed Height (inches)	Rate (fl oz/A)
1-3	15
4-8	20
8-18	30

Giant ragweed: Apply 20 fluid ounces per acre when the weed is 8-12" tall to avoid the need for sequential application.

Black nightshade, Pennsylvania smartweed, velvetleaf, and waterhemp: Apply 20 fluid ounces per acre to weeds 3-6" tall, and 30 fluid ounces per acre when weeds are up to 12" tall. For morningglory species, apply 20 fluid ounces per acre when weeds are up to 4" tall and 30 fluid ounces per acre when weeds are up to 6" tall.

Some weeds, such as black nightshade, woolly cupgrass, shattercane, wild proso millet, burcumber, and giant ragweed, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 15 fluid ounces of this product per acre for sequential applications.

SOUTHEAST RECOMMENDATIONS

Narrow row, drilled, or wide-row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 20 fluid ounces per acre on 3-6" weeds is recommended. Weeds will generally be 3-6" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
3-6	20
6-12	30

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product at 10 to 20 fluid ounces per acre may be necessary to control late flushes of weeds.

Sequential Application (if needed)

Weed Height (inches)	Rate (fl oz/A)
2-3	10
3-6	15
6-12	20

Florida pusley, hemp sesbania and spurred anoda: Apply 20 fluid ounces per acre to weeds 2-4"for the initial application. Apply 20 fluid ounces per acre when these weeds are 3-6" tall if a sequential application is necessary. Morningglory, black nightshade, groundcherry, and Pennsylvania smartweed: Apply 15 fluid ounces per acre on 1-3" weeds, 20 fluid ounces per acre on 3-6" weeds, or 30 fluid ounces per acre on 6-12" weeds for the initial application.

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 10 fluid ounces of this product per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 2 quarts (64 fluid ounces) per acre.

DELTA/MID-SOUTH RECOMMENDATIONS

Narrow row, drilled, or wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. A sequential application will be required to control new flushes of weeds. For best results, an initial application of 20 fluid ounces per acre (fl oz/A), on 2-4" weeds is recommended. Weeds will generally be 2-4" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
2-4	20
5-12	30

Sequential Application

Weed Height (inches)	Rate (fl oz/A)
2-3	10
3-6	15
6-12	20

Hemp sesbania and spurred anoda: Apply a sequential treatment of 20 fluid ounces per acre on 3-6"weeds if necessary

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 10 fluid ounces of this product per acre for sequential applications.

PERENNIAL WEEDS RATE RECOMMENDATIONS

A 20 to 40 fluid ounces per acre rate (single or multiple applications) of this product will control or suppress perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly.

For best results, allow perennial weed species to achieve at least 6" of growth before spraying with Roundup D-PAK. For additional information on perennial weeds, see the "PERENNIAL WEED RATE TABLE" of the label booklet for Roundup D-PAK. For some perennial species, repeat application may be required to eliminate crop competition throughout the growing season.

Read the "Limit of Warranty and Liability" in the label booklet for Roundup D-PAK herbicide before using. For over-the-top uses on Roundup Ready crop varieties, crop safety and weed control performance are not warranted by Monsanto when this product is used in conjunction with "brown bag" or "bin run" soybean seed saved from previous year's production and replanted. These terms apply to this supplemental labeling and if these terms are not acceptable, return the product unopened at once.

MONSANTO COMPANY
ST. LOUIS, MISSOURI 63167

This supplemental label will expire February 1, 2001

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SUPPLEMENTAL LABELING

READ THE ENTIRE LABEL FOR ROUNDUP D-PAK™ HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Label" as used in this supplemental labeling refers to the label booklet for Roundup D-PAK, container labels and this supplement.

Roundup D-PAK™ Herbicide

EPA Reg. No. 524-494

FOR POSTEMERGENCE APPLICATIONS TO SOYBEANS WITH THE ROUNDUP READY® GENE

Keep out of reach of children.

CAUTION!

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This label must be in the possession of the user at the time of application.
See "GENERAL INFORMATION" and "APPLICATION INSTRUCTIONS" sections of the label booklet for Roundup D-PAK herbicide for essential product performance information.

General Information

MONSANTO COMPANY RECOMMENDS USE OF THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON SOYBEAN VARIETIES DESIGNATED AS CONTAINING THE ROUNDUP READY® GENE.

- Applying this product to soybean varieties which are not designated as Roundup Ready® will result in severe crop injury and yield loss. Avoid contact with foliage, green stems, or fruit of crops, or any desirable plants which do not contain the Roundup Ready gene, since severe injury or destruction will result.

- The Roundup Ready designation indicates that the soybean contains a patented gene which provides tolerance to this herbicide. Information on Roundup Ready soybeans may be obtained from your seed supplier or Monsanto representative.

Application Instructions

This product may be applied postemergence to Roundup Ready soybeans from the cracking stage throughout flowering. Allow a minimum of 14 days between final application and harvest or feeding of soybean grain, forage or hay.

Maximum Allowable Application Rates:

• Combined total per year for all applications	5	quarts per acre
• Preplant, Preemergence applications	3.2	quarts per acre
• Total in-crop applications from cracking throughout flowering	2	quarts per acre
• Maximum preharvest application rate	20	fluid ounces per acre

When applied as directed, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready soybeans. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product.

PRECAUTIONS/RESTRICTIONS: The combined total application from crop emergence through harvest must not exceed 2 quarts per acre. The maximum rate for any single in crop application is 40 fluid ounces per acre. The maximum combined total of this product which can be applied during flowering is 40 fluid ounces per acre. Allow a minimum of 14 days between final application and harvest of soybean grain, forage or hay.

There are no rotational crop restrictions following applications of this product.

For ground applications: Use the recommended rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles which provide a flat fan pattern. Check for even distribution of spray droplets.

For aerial applications: Use the recommended rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed 20 fluid ounces of this product per acre unless otherwise directed. DO NOT APPLY DURING LOW LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. MAINTAIN APPROPRIATE BUFFER ZONES TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION.

ANNUAL WEED RATE TABLES

The following rate recommendations will provide control of labeled grasses and broadleaf weeds in conventional and no-till soybean production systems. Refer to the label booklet for rate recommendations for specific annual weeds.

Monsanto will not warrant crop safety or weed control when Roundup Ready soybeans are treated with herbicides not specified on this supplemental label. Because of the potential for; 1) crop injury, 2) poor weed control from antagonism, and/or 3) rotational crop restrictions, herbicides not specified on this supplemental label should not be used, whether applied preemergence or applied postemergence as a tank mixture with Roundup D-PAK.

This product may be used up to 40 fluid ounces per acre in any single application for control of annual weeds, where heavy weed densities exist.

NOTE: The following recommendations are based on a clean start at planting by using a burn down application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a preplant burn-down treatment of 10-40 fluid ounces per acre of this product can be used to control existing weeds prior to crop emergence.

MIDWEST/ MID-ATLANTIC RECOMMENDATIONS

Narrow row or drilled soybeans: A single in-crop application of this product will provide effective control of labeled weeds. For best results, an initial application of 20 fluid ounces per acre on 4-8" weeds is recommended. Weeds will generally be 4-8" tall 3 to 5 weeks after planting. If the initial application is delayed and weeds are 8-18" tall, use 30 fluid ounces per acre for best results.

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product at 15 to 20 fluid ounces per acre may be necessary to control late flushes of weeds.

Wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 20 fluid ounces per acre on 4-8" weeds is recommended. Weeds will generally be 4-8" tall 3 to 5 weeks after planting. If new flushes of weeds occur, they can be controlled by sequential applications of this product.

Initial and Sequential (if needed) Applications

Weed Height (inches)	Rate (fl oz/A)
1-3	15
4-8	20
8-18	30

Giant ragweed: Apply 20 fluid ounces per acre when the weed is 8-12" tall to avoid the need for sequential application.

Black nightshade, Pennsylvania smartweed, velvetleaf, and waterhemp: Apply 20 fluid ounces per acre to weeds 3-6" tall, and 30 fluid ounces per acre when weeds are up to 12" tall. For morningglory species, apply 20 fluid ounces per acre when weeds are up to 4" tall and 30 fluid ounces per acre when weeds are up to 6" tall.

Some weeds, such as black nightshade, woolly cupgrass, shattercane, wild proso millet, burcumber, and giant ragweed, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 15 fluid ounces of this product per acre for sequential applications.

SOUTHEAST RECOMMENDATIONS

Narrow row, drilled, or wide-row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 20 fluid ounces per acre on 3-6" weeds is recommended. Weeds will generally be 3-6" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
3-6	20
6-12	30

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product at 10 to 20 fluid ounces per acre may be necessary to control late flushes of weeds.

Sequential Application (if needed)

Weed Height (inches)	Rate (fl oz/A)
2-3	10
3-6	15
6-12	20

Florida pusley, hemp sesbania and spurred anoda: Apply 20 fluid ounces per acre to weeds 2-4"for the initial application. Apply 20 fluid ounces per acre when these weeds are 3-6" tall if a sequential application is necessary. Morningglory, black nightshade, groundcherry, and Pennsylvania smartweed: Apply 15 fluid ounces per acre on 1-3" weeds, 20 fluid ounces per acre on 3-6" weeds, or 30 fluid ounces per acre on 6-12" weeds for the initial application.

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 10 fluid ounces of this product per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 2 quarts (64 fluid ounces) per acre.

DELTA/MID-SOUTH RECOMMENDATIONS

Narrow row, drilled, or wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. A sequential application will be required to control new flushes of weeds. For best results, an initial application of 20 fluid ounces per acre (fl oz/A), on 2-4" weeds is recommended. Weeds will generally be 2-4" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
2-4	20
5-12	30

Sequential Application

Weed Height (inches)	Rate (fl oz/A)
2-3	10
3-6	15
6-12	20

Hemp sesbania and spurred anoda: Apply a sequential treatment of 20 fluid ounces per acre on 3-6"weeds if necessary

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 10 fluid ounces of this product per acre for sequential applications.

PERENNIAL WEEDS RATE RECOMMENDATIONS

A 20 to 40 fluid ounces per acre rate (single or multiple applications) of this product will control or suppress perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly.

For best results, allow perennial weed species to achieve at least 6" of growth before spraying with Roundup D-PAK. For additional information on perennial weeds, see the "PERENNIAL WEED RATE TABLE" of the label booklet for Roundup D-PAK. For some perennial species, repeat application may be required to eliminate crop competition throughout the growing season.

Read the "Limit of Warranty and Liability" in the label booklet for Roundup D-PAK herbicide before using. For over-the-top uses on Roundup Ready crop varieties, crop safety and weed control performance are not warranted by Monsanto when this product is used in conjunction with "brown bag" or "bin run" soybean seed saved from previous year's production and replanted. These terms apply to this supplemental labeling and if these terms are not acceptable, return the product unopened at once.

MONSANTO COMPANY
ST. LOUIS, MISSOURI 63167

This supplemental label will expire February 1, 2001

SUPPLEMENTAL LABELING

READ THE ENTIRE LABEL FOR ROUNDUP D-PAK™ HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Label" as used in this supplemental labeling refers to the label booklet for Roundup D-PAK herbicide, container labels and this supplement.

Roundup D-PAK™

ACCEPTED
NOV 4 1999
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No 524-494

EPA Reg. No. 524-494

FOR POSTEMERGENCE APPLICATIONS TO CORN WITH THE ROUNDUP READY® GENE

Keep out of reach of children.

CAUTION!

In case of emergency involving this product, Call Collect, day or night, 314-694-4000.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

This label must be in the possession of the user at the time of application.

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY® CROPS) DESIRABLE PLANTS AND TREES, OTHER THAN CORN WITH THE ROUNDUP READY GENE, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

See "GENERAL INFORMATION" and "MIXING" sections of the label booklet for Roundup D-PAK™ herbicide for essential product performance information.

GENERAL INFORMATION

MONSANTO COMPANY RECOMMENDS USE OF THIS PRODUCT ONLY ON CORN HYBRIDS DESIGNATED AS CONTAINING THE ROUNDUP READY GENE.

- Applying this product to corn hybrids which are not designated as *Roundup Ready will result in severe crop injury and yield loss.*
- The Roundup Ready designation indicates that the corn contains a patented gene which provides tolerance to this herbicide. Information on *Roundup Ready corn may be obtained from your seed supplier or* Monsanto representative.

Application Instructions

This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height *reaches 30 inches, whichever comes first. Single in-crop applications of this* product are not to exceed 20 fluid ounces per acre. Sequential in-crop applications of this product from emergence through the V8 stage or 30 inches must not exceed 40 fluid ounces per acre per growing season.

Maximum Yearly Rates Allowed

Preplant: *Maximum amount of this product which can be applied prior to* crop emergence is 3.2 quarts per acre.

In-crop: Maximum combined total of multiple in-crop applications from emergence through the V8 stage or 30 inches is 40 fluid ounces per acre.

Preharvest: Maximum amount of this product that can be applied after maximum kernal fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest is 20 fluid ounces per acre.

Cropping Season: Combined total per year for all applications may not exceed 5 quarts per acre.

When applied as directed, this product controls labeled annual grass and broadleaf weeds in Roundup Ready corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product. Applications should be made to actively growing weeds before they reach the maximum size listed in the "WEEDS CONTROLLED" section of the label booklet for Roundup D-PAK herbicide. Refer to the "MIXING" section of the label booklet for proper use instructions.

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product under hard water conditions, drought conditions or when tank mixed with Bullet®, Micro-Tech® or Partner® herbicides. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion. The addition of other additives, including fertilizers and micro-nutrients are not recommended with this product since this may result in increased potential for crop injury.

Allow a minimum of 50 days between application of this product and harvest of corn forage and 7 days between application and harvest of corn grain. Allow a minimum of 10 days between in-crop applications of this product. There are no rotational crop restrictions following applications of this product.

ATTENTION: AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN THE ROUNDUP READY GENE.

THOROUGHLY CLEAN THE SPRAY TANK AND ALL LINES AND FILTERS TO ELIMINATE POTENTIAL CONTAMINATION FROM OTHER HERBI-CIDES PRIOR TO MIXING AND APPLYING THIS PRODUCT.

For ground applications: Use the recommended rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select correct nozzles and spray pressure to avoid spraying a fine mist. Check for even distribution of spray droplets.

For aerial applications: Use the recommended rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed 20 fluid ounces per acre. See "WEEDS CONTROLLED" section on this label. AVOID DRIFT - DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

Weed Control Recommendations

Apply 15 to 20 fluid ounces of Roundup D-PAK herbicide per acre for control of labeled grasses and broadleaf weeds in conventional and no-till corn production systems. Refer to the label booklet for Roundup D-PAK herbicide for rate recommendations for specific annual weeds. Roundup D-PAK herbicide applied at up to 20 fluid ounces per acre will control or suppress the growth of perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly. For additional information on perennial weeds, see the "PERENNIAL WEED RATE TABLE" of the label booklet for Roundup D-PAK herbicide.

Preemergence followed by Postemergence Weed Control Program

This product may be applied postemergence in-crop following any labeled preemergence herbicide application. The post application of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. A single in-crop application of this product at the recommended rate will provide control of emerged weeds listed on the label. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches (free standing), whichever comes first.

Postemergence Only Weed Control Program

This product may be applied alone as a postemergence in-crop application to provide control of emerged weeds listed on the label. The postemergence application of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. If new flushes of weeds occur, a sequential application of this product at 15 to 20 fluid ounces per acre will control the labeled grasses and broadleaf weeds. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage or until corn height reaches 30 inches (free standing), whichever comes first.

This product may be applied in tank mixture with a labeled rate of Harness®, Harness Xtra, Harness Xtra 5.6L, Micro-Tech, Bullet, Partner, Permit® or atrazine. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines - the more restrictive requirements apply. Tank mixtures with other products may result in increased potential for crop injury and/or weed antagonism. Refer to the table below for height limitation for tank mix partner.

Tank Mix Partner	Maximum Height Of Corn For Application
Harness Harness Xtra Harness Xtra 5.6L	11 inches
Bullet* Micro-Tech* Partner*	5 inches
Permit	24 inches
Atrazine	12 inches

*Bullet, Micro-Tech and Partner are not registered for use as a postemergence application in Texas.

Bullet, Harness, Micro-Tech and Partner are registered trademarks of Monsanto Company.

Permit is a trademark of, and used under license from, Nissan Chemical Industries, Ltd.

Read the "LIMIT OF WARRANTY AND LIABILITY" in the label booklet for Roundup D-PAK herbicide before using. For over-the-top uses on Roundup Ready crop varieties, crop safety and weed control per-formance are not warranted by Monsanto when this product is used in conjuction with "brown bag" or "bin run" seed saved from the pre-vious year's productions and replanted. These terms apply to this supplemental labeling and if these terms are not acceptable, return the product unopened at once.

This supplemental label expires Febraury 1, 2001.